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ABSTRACT

This guide, written for parents, teachers, and students, presents advice on academic study habits derived from research data. Part 1 of the text presents the research evidence in five chapters: chapter 1 reviews common study skills problems; chapter 2 focuses specifically on research data from eight studies which successfully used precollege study skills/remedial courses with underdeveloped students; chapter 3 presents the research literature on identifying study skills problems; chapter 4 outlines ways to overcome poor study habits; and chapter 5 presents the implications of the research for remedial program design. Part 2 of the text presents specific and detailed suggestions for student study skill development in five chapters devoted to academic classes and classroom protocol, notetaking, listening, reading, and test taking. Chapter 11 presents concluding remarks. A comprehensive bibliography and name and subject indexes are included. (BL)

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STUDY HABITS:

Advice to Students, Parents, and Teachers From Research Data

Mark E. Thompson

U.S. DEPARTMENT OF EDUCATION
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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

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To my mother and father:

Malinda Robey Thompson
James Carter Thompson

ACKNOWLEDGEMENTS

The idea for this book came from my experiences teaching in a community college and the work I did on my dissertation, "An Analysis of the Entwistle Student Attitudes Inventory and its Contribution to the Prediction of Academic Achievement with a Community College Population." Some of the material in this book was taken from my dissertation. Several articles from this book have appeared in the Educational Resources Information Center (ERIC documents). Other articles from this book have been included in *College and Adult Reading, Reading Horizons,* and *Research in Higher Education.* Research included in Chapter 2 was presented to the North Central Reading Association at Champaign, Illinois on October 28, 1977.

I want to thank Professor Jim Broadus for reading the manuscript and providing comments. Professor Holman Hamilton provided me with encouragement to publish this book and has given me support in many different ways. My doctoral committee was a collection of scholars with different perspectives regarding a book of this nature, and I thank them for their help while I was writing my dissertation. They are Professors Collins Burnett, David Denton, Charles Elton, Tom Ford and Edgar Sagan.

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PREFACE

This book presents and explains a considerable amount of research on study habits and student characteristics. This information is intended to help students identify and understand study problems. It is also intended to help teachers and parents focus on those strategies that might provide support to weak students. The research studies provided in this book are the result of a careful screening with an emphasis on the notion that high-risk students can be helped--either before or after they enter a college or university.

Students who are having study problems often do not understand that their problems can be resolved with the help of professional study skills counselors. There are no simple solutions or gimmicks available to solve study skills problems. However, there are some suggestions based on the research literature that might help. Study skills teachers and counselors are also frequently operating without knowledge of the research literature on study skills and habits. Too often learning centers are established in institutions of higher education and are staffed with people of good intentions but no knowledge of the research literature on study skills. Students, teachers, and parents should be in a better position to cope with study skills problems if they know what the problems are and how to go about solving them. From a study of the research literature, we know what has worked in the past and what might help in the future. A knowledge of the research literature provides a starting point for understanding study skills problems. Individual approaches may be required.

Special attention is given to the weak, underdeveloped student, sometimes referred to as the high-risk student--one who may have trouble succeeding in any academic system. It is suggested throughout this book that underdeveloped students can be helped if they are willing to help themselves.

This book can serve as a reference on study skills for any instructor involved in teaching a study habits course. The second half of this book is devoted to specific suggestions for students in the areas of: classroom protocol, taking notes, listening, reading, and taking examinations. Students should find the second half of this book to be sound information, enabling them to organize their academic activities.

Parents are provided with suggestions on how to identify sound study skills programs and how to advise their student children. Teachers in secondary schools and institutions of higher learning who are interested in what the research literature has to say about study skills may find this book useful. Considerable research is presented and discussed.

The unique feature of this book is the attempt to present research literature in a narrative that can be understood. Most study skills books on the market do not make reference to the research literature, and many make exaggerated claims offering to solve student problems. This presentation is a serious attempt to deal with study skills problems and impress upon the student, parent, and teacher that improvement is possible with an understanding of the problem. Suggestions offered in this book are based on years of research by dedicated scholars.

Mark E. Thompson

Gaithersburg, Maryland
September 1981

CHAPTER I

Some Common Study Skills Problems

There are numerous factors or variables that contribute to academic success. Some important variables are good health, academic aptitude, and certain attitudes that students have regarding their environment. The logic for identifying study skills as a variable that may enhance academic growth in higher education is related to the environmental differences between high school and college. In high schools, students receive greater support from their teachers. College teachers present more depth and expect independent work from their students. The need for independent study increases as the student progresses in higher education. It is essential for college and university students to adapt quickly to the new learning environment and to accept responsibility for academic development.

The student most likely to be more successful than others, may exhibit better study habits, and adapt more easily to academic norms and requirements of the college. Consequently, students may become more self-confident about their ability and have the personality characteristics for successful, independent study (Hewitt, 1973 and Gadzella and Fournet, 1976).

Successful students tend to plan their work carefully, think ahead, are conscientious, independent, self-confident, and recognize the importance of finding suitable conditions for effective study (Entwistle and Entwistle, 1970). Being self-confident or having a positive self-image is related to an important trait concerning one's psychological health. It is healthy to feel good about yourself and to be self-confident. Developing habits that will help one to become academically successful may promote self-confidence. There is an *overwhelming* body of contemporary research that points to the relationship between self-esteem and academic achievement (Purkey, 1970). It is a fact that "...many students have difficulty in school not because of low intelligence, poor eyesight, poverty, or whatever, but because they have learned to see themselves as incapable of handling academic work or to see the work as irrelevant to their perceptual worlds" (Purkey, 1970, p. 2).

William Glasser (1969), a psychiatrist, claims to have discovered an important fact regarding failure;

regardless of how many failures a person has had in the past, regardless of background, culture, color or economic level, students will not succeed in general until they can in some way first experience success in one important part of their life. There is considerable research in the fields of education, psychology, and sociology to support this position. It is important to understand that the ways in which students view themselves and their world are products of how others see them (Purkey, 1970). Cultural traits of the underdeveloped reappear time and time again: social isolation, low self-image, limited aspirations, inability to communicate, impulsiveness, existence-oriented rather than improvement-oriented, fear, resignation, fatalism, and inability to understand bureaucratic behavior (Anderson, 1971). These traits handicap students, but this handicap may be a temporary state, capable of being reversed.

Jess Lair (1969), a humanistic psychologist, said that people can lose all their confidence and independence when they get next to school or books, and it happens to very mature and successful people who return to school. "There is some real, practical, everyday learning available to you from books and schools. But to get that learning, you need to be hard-headed and trust your own ability to direct your learning and not abandon your responsibility to your learning" (Lair, 1969, p. 62). Students need to have confidence in their ability but they also need to be able to apply themselves to academic tasks. Academic tasks include reading, writing, problem solving, taking notes, taking examinations, and accomplishing mathematical calculations. Knowing how and when to apply these tasks can be an asset. These academic tasks are skills that can be learned and developed just as an athlete learns to throw a football or dribble a basketball. Some students may be more interested or adept in one skill over another, but they can learn to improve their academic skills.

Benjamin Bloom (1968), a respected educator, has taken the position that if every normal student had a very good tutor, they would be able to learn a particular subject to a high degree. According to Bloom (1968), aptitudes are predictive of *rate* of learning, rather than the *level* of learning that is possible. Given enough time, mastery of the subject material is possible for most students. Carl Rogers (1961), a well-known humanistic psychologist, said:

> ...experience has forced me to conclude that the individual has within himself the capacity and the tendency, latent if not evident, to move forward toward maturity. In a suitable psychological climate this tendency is released, and becomes actual rather than potential....This tendency may become deeply buried under layer after layer of encrusted psychological defenses; it may be hidden behind elaborate facades which deny its existence; but it is my belief that it exists in every individual, and awaits only the proper conditions to be released and expressed (p. 35).

There is considerable evidence that many of the neurotic symptoms displayed by college students are exacerbated by painful and frustrating experiences within institutional learning experiences. Bloom (1968) claimed "mastery learning" can be one of the more powerful sources of good mental health. Mastering a skill or subject gives you a sense of accomplishment and helps to instill confidence. McDavid (1959) suggested that academic success may result in a more positive self-image, which may lead to increased success in an educational setting. It has been said that all behavior, without exception, is dependent upon the individual's personal frame of reference (Combs and Snygg, 1959). Those who have experienced success are more likely to think positively about their environment than those who have failed.

It is most important to understand that students can improve upon their academic skills if they are willing to try. Wallach and Wing (1969) found evidence that students who excel at self-initiated activities will go on to make meaningful contributions as adults. Furthermore, research indicates mastery of a skill helps to build self-confidence, which is good for your mental health. Astin (1977a) suggests that college attendance may increase an individual's sense of competence and self-worth. Academic skills, like athletic skills, require considerable effort and practice to master them. The scholar, like the athlete, must practice the skills that are required to be successful. Considerable reading, writing, and study behavior are required of scholars. These activities are learned and practiced by scholars in the hope of improving upon their own knowledge and advancing the available knowledge in the world. A wise person never stops learning. This may sound trite, but active people have learned that knowledge is related to worldly wisdom, and there is always something new to learn. Serious scholars continue to read, research, and study as long as they are physically able.

Students who have been out of college then return after several years often find it difficult to concentrate and get into the swing of academic life. There is a pattern that successful students adjust to during the course of their studies. They plan their work, so that it can be accomplished on time, and they feel in control of the situation. This feeling is based on the confidence they have to do the job. Students entering college from high school may have some serious problems adjusting to the academic requirements in higher education, due to their undeveloped skills and the more rigorous collegiate academic requirements they encounter.

> An eighteen-year-old who is leaving home for the first time to attend college is subject to wide-ranging influences from faculty, staff, and fellow students. The possible influence of parents is no longer present. Many freshmen experience their first intensive encounter with peers who have markedly different beliefs, backgrounds, and attitudes. For some, enrolling in college may also provide the students' first direct experience with drugs, sex, alcohol, and political activism. For others, college presents the first real challenge to their academic motivation and skills (Astin, 1977a, p. 6).

Many beginning college students have adjustment problems, but they can learn how to adapt their behavior to fit into the collegiate life style. This adjustment process is one aspect of growing and maturing. Everyone has to make adjustments during the course of human events, and we learn to adapt to different environments. Human beings are quite flexible; we can adjust to a variety of different social environments. Being a student is a role you can learn in the academic social environment. The student role requires that you read, write, and study often. This behavior can be learned if you have not mastered academic skills. The learning process is a form of adjustment that individuals go through while getting a formal education. One important aspect of formal education is learning how to learn. Lifelong learning is an important byproduct of your formal education.

> The only man who is educated is the man who has learned how to learn; the man who has learned how to adapt and change; the man who has realized that no knowledge is secure, that only the process of seeking knowledge gives a basis for security. Changingness, a reliance on process rather than upon static knowledge, is the only thing that makes any sense as a goal for education in the modern world (Rogers, 1969, p. 104).

To achieve, students need to be interested in college, have a good self-image regarding learning, and attain a sense of control of the environment (Coleman et al., 1966). For students entering college without these attributes, failure to persist is often the result. Those students who are highly motivated to achieve are more persistent in the achievement-oriented activity we call getting on education, and they are less frequently to be found among dropouts (Atkinson, 1965). This trait is particularly evident among good students. Beyond a certain basic level of ability, the most distinguishing student characteristic is a single minded desire or motivation to be successful. "On the average, ego-enhancement motivation is undoubtedly the strongest motivation available during the active portion of an individual's academic and vocational career" (Ausubel, 1968, p. 378). The desire to be successful is a powerful force in the lives of many people.

Your job prospects, income potential, access to political and civil service positions, marital prospects, and other opportunities are greatly altered by having a college degree (Meyer, 1972). The number of years in school (high school and college) has a powerful effect on earnings. Society *does* offer greater financial rewards to the college graduate compared to the nongraduate. This state of affairs is a documented fact throughout the world (Blaug, 1970). Blaug (1970) has observed that better educated people are generally more flexible, more motivated, better at problem solving, and more productive. The question is whether formal education teaches these attributes or acts as a screen for those who have these characteristics. Other traits of better educated people are that they tend to have better educated parents, come from small families, live in cities, have better academic records, live longer, and are healthier. Having an education is associated with a particular life style that is appealing. It behooves potential students to know as much as possible about themselves and their academic environment, if they intend to get an education and graduate.

Students who desire or expect to improve have the best chances of developing their academic skills. It has been demonstrated that students who believed they would be helped by a study skills course were helped to a greater extent than those who were doubtful (Tresselt, 1966). Students should be self-critical and motivated, if improvement is to be demonstrated. Weinland (1974) said that self-criticism is an effort on the part of a person to build a distinctive individuality. Being autonomous or distinctively individualistic is an important characteristic found among superior students. Students that know when to study and follow their instincts are apt to be individualistic. They tend to do what is necessary to survive in college, regardless of the temptations to do otherwise. Study skills can help you to survive in higher education. The decision to utilize your academic skills and form study habits can promote your academic career. The decision to help yourself can only be made by you. Parents and teachers can give support, but you have to make the decision to do the work. Your attitude is the key. In 1960, Entwisle reviewed the research literature and made evaluations of 22 study skills courses. Entwisle concluded:

1. A study skills course will usually be followed by improvement.
2. A course will be most beneficial for students desiring to take it.
3. Students wishing to take a study skills course but prevented from doing so, and therefore presumably or comparable motivation to those enrolled, fail to show significant improvement.
4. Any gains noted will not necessarily be related to either the content or the duration of the course.

Perhaps the most difficult element to measure in terms of student characteristics is motivation. Bannatyne (1971) said the study of motivation comprises one of the most controversial sections of psychology. Ausubel (1968) said, "After fifty years or more of research on motivation, perhaps the most striking conclusion that emerges from consideration of the staggering mass of research data and theory in this area is how little we really know about it, and how much is still a matter of conjecture and speculative preference" (p. 363). Entwistle et al. (1974) have noted that educational research has failed to respond to pleas for conceptual clarity regarding the term "motivation." Achievement motivation may be too general to accurately measure (Lavin, 1965). Academic motivation is more specific, and several researchers have attempted to isolate this concept from the general trait of achievement motivation. In this country, Finger and Schlesser (1965) used their Personal Values Inventory to produce factors which were related to academic performance, while remaining independent of scholastic aptitude. In Britain, Entwistle et al. (1971) developed specific scales of academic motivation and study methods which show consistent relationships with degree results across different subject areas.

An individual motivated to accomplish a task will continue working at it in spite of numerous obstacles. Athletes practice their speciality over and over in order to achieve the desired result--winning a game or being first in individual competition. Scholars also practice their specialty over and over--reading, writing, and studying. Academic tasks require basic training in reading, mathematical skills, writing, and structured thought processes. Reading and study behavior are most important. Presumably, students received basic training in these academic skills while attending elementary and secondary schools. If students entering college have not mastered these skills, special training will be required in order to progress in higher education. Many students may not have learned to apply their academic skills in a rigorous scholastic environment. Students entering higher education may not understand the unique requirements of collegiate life. Special training with skilled instructors can help, if students have made up their minds to help themselves.

Students entering higher education for the first time have adjustment problems other than academic requirements. For many new students this is the first time they have been completely on their own. The temptation to squander time on frivolous activity in place of study is great. Students must accommodate themselves to an entirely new environment. You will need to meet new friends, master study skills, adjust to the collegiate social environment, and become acclimated to new physical surroundings. This is a challenge for persons that are also adjusting to adult roles from adolescence behavior. Many students will have no problems adjusting, but for others the problems will be great. You must remember that maintaining passing grades is the *prime* requirement in the life of a college student. Without passing grades you cannot stay in college. With passing grades your adjustment in college will probably be more pleasant and rewarding.

Students should be realistic when evaluating their academic position. Research with underachievers indicates they consistently overestimate their capabilities. Underachievers have a stubborn, yet perfectly sincere, overevaluation of the level of their work (Pitcher and Blauschild, 1970). They are not logical when estimating their abilities, and as a result have unrealistic aspirations. Some underachievers may aspire to become lawyers, when they cannot read at the seventh grade level or wish to become physicians, when they have no background in the sciences. It is great to know what you want to do, but it takes courage to face up to the realities of your academic position.

Courage to admit shortcomings and change your habits is essential for academic growth. "Life, willing to surpass itself, is the good life, and the good life is the courageous life" (Tillich, 1975, p. 29). Courage does not reduce anxiety, nor does it cause you to feel more comfortable. Often a courageous attitude may produce anxiety. Active people learn to control anxiety and proceed about their business ignoring petty annoyances. You can learn to control anxiety by keeping active and concentrating on the immediate task at hand. It is normal to be anxious about academic requirements, but it takes courage to face up to the requirements and attempt to master them. "Life is a pitting of the self against difficulties" (May, 1972, p. 145).

Berger (1961, 1963) has concluded that the concept of "willingness to accept limitations" is a healthy indication when observed in students. Students with a willingness to accept limitations deny that they have extremely high standards for themselves; admit wholeheartedness in their efforts to achieve; admit willingness to try their best, despite a risk of not doing well and acknowledge the credibility of hard work in achievement. The self-concepts of students who accept limitations are not rigid or absolute but allow for a wide variety of self-perceptions that are consistent with being human (Berger, 1961). Being human means, among other things, being aware of your shortcomings and enjoying yourself inspite of them.

If you are fortunate enough to know what you want to do, and academic preparation is required to fulfill your goal, then plan to do the best possible job competing in the academic environment. It is not difficult to enter undergraduate college these days, but professional schools are quite competitive. If you intend to enter a professional school you should get accustomed to the notion of competing for grades. Law and medicine are particularly competitive.

There is considerable evidence that indicates successful students tend to plan their work carefully, think ahead, are conscientious, independent, self-confident, and recognize the importance of finding suitable conditions for effective study (Entwistle and Entwistle, 1970). Davie (1961), in reviewing the literature of superior students at Yale, found them to be serious, academically-oriented, upwardly mobile students whose major capabilities, interests, experiences, and satisfaction lie in academic as opposed to non-intellectual life activities. A detailed study of high ability students by Wisconsin University (1974) found that the most frequently listed hobby of honors students was reading. Honors students have been found to be intellectually oriented toward academic work, and they are flexible thinkers (Capretta et al., 1963). The so-called gifted students are characterized as being strongly attracted to intellectual activity combined with high levels of esthetic awareness and appreciation (Warren and Heist, 1960). Holland and Astin (1962) did an analysis of high ability students and found that academic achievement is associated with self-control, persistence, socialization, and superego strength (self-judgmental functions).

In general, superior students exhibit habits or traits which are synonymous with effective study methods. Observations of superior students indicate they are generally better organized while accomplishing academic tasks such as taking notes, working on examinations, and studying for assignments. These are general characteristics, and there is considerable variation between students regarding specific study behavior. You should be aware of the fact that superior students in general are better organized than failing students. This general characteristic may be masked by an apparent helter-skelter appearance on the surface, but *do not* underestimate the organizational ability of any student that makes top grades. Quite often students give the appearance of being disorganized and in a state of confusion; but they know very well what their priorities are, and they actively pursue these goals. Do not be fooled by students who make claims of not having to study. Talented students with considerable ability have to study to maintain good grades.

There are numerous researchers who have indicated that teaching study strategies to a college population can make a difference in performance (Pressey, 1928; Weinland, 1930; Eckert and Jones, 1935; Carter, 1948; Danskin and Burnett, 1952; Maclachland and Burnett, 1954; Shaw, 1955; McDonald, 1957; Davie, 1961; Maxwell, 1963; McConihe et al., 1964; Pond, 1964; Pauk, 1965a, 1965b; Spache, 1964; Ikenberry et al., 1966; Crewe, 1969; Rickabaugh, 1969; Cartwright, 1970; Child, 1970; Christ, 1970; Egeland et al., 1970; Miller and Stillwagon, 1970; Pepper, 1970; Rosella, 1970; Cartwright, 1971; Kerstiens, 1971; Ritter, 1971; Kaye, 1972; Kling, 1972; Goldman and Hudson, 1973; Goldman and Warren, 1973; Shaffer, 1973; Treppa, 1973; and Thompson, 1975). In an effort to give you some insight regarding this research, a few of these studies will be examined and references will be made to this evidence. You should attempt to understand the research evidence, because it explains some important notions about student characteristics and study method strategies.

One of the earliest studies conducted with high-risk students using a study skills treatment was reported by Luella Pressey at Ohio State in 1928. Pressey (1928) reported on a study methods class offered to students on academic probation. The study skills course consisted of one lecture, one interview, and one two-hour laboratory period each week during the semester. The topics covered included: note taking, time budgeting, efficient reading methods, and a need for adequate preparation. During the period from 1924 through 1927, 54 students were enrolled in the study skills class. These students were compared to a control group which had no study skills treatment and were equal in ability. In the study skills group 58% were able to continue with their studies and 42% were not. In the control group (those with similar ability but no study skills training) 82% were *not* able to continue and 18% were able to continue their studies. Pressey (1928) concluded that study skills training can help students, but those who are in the higher ability groupings have a better chance to benefit from the training. Tresselt (1966) also found that students of higher ability have a better chance to benefit from study skills training.

In 1930 Weinland reported on the characteristics of good students and found they were self-reliant, avoided distractions, alternated tasks frequently, worked when interest in the subject matter was low, kept complete notes, read rapidly, and belonged to social groups. Weinland (1930) concluded that various types of students could be more efficient if they were given training in how-to-study. Carter (1948), Danskin and Burnett (1952), Machlachlan and Burnett (1954), Davie (1961), Pond (1964), Goldman and Hudson (1973), Goldman and Warren (1973), and Treppa (1973) found similar characteristics and concluded that most students could profit from pointers on efficient study habits. It is important to understand that several different researchers with different approaches have found similar characteristics when they examined college students.

It has been found that many superior students do not have efficient study skills, but they do have a high aptitude for academic work that allows them to earn acceptable grades. In theory low aptitude students might be in a better position to earn good grades if they could improve their study skills. Student attitudes could influence the chances of success regardless of measured ability. A negative attitude toward college academic achievement might influence a student's chances of success in a negative direction, even though measured ability is high. Using similar logic, one might postulate that a positive attitude toward college academic achievement among low ability students might influence chances of success in a positive direction.

Considerable evidence has been accumulated during the past half century to indicate that students can be helped through a study habits approach. This is not just an idea that some teachers have; it is an understanding gained from the research evidence. The approach that appears to be *most* profitable focuses on organization, flexibility, concentration, and a healthy feeling regarding one's own ability. These concepts (organization, flexibility, concentration, and self-concept) are difficult to teach and master. You need to recognize the importance of these concepts when doing academic work. Being well organized can save time and keep you on schedule. Being flexible means knowing when to pass over unimportant information and how to concentrate on significant facts. The ability to concentrate requires self-discipline and control.

Having a good feeling about yourself amounts to knowing your limitations and capabilities while being confident. There is no special formula that can be applied to all students having academic trouble; however, students can work and improve, if they realistically evaluate their characteristics and aptitudes.

Everyone is different, and there may not be one particular method of study that can be applied to all students. A mixture of personality characteristics, aptitudes, and motivational levels make all of us different, but we can improve upon the skills we have. You can learn to be more efficient with your time and to improve upon your study technique with the help of a professional study skills counselor. Have confidence in your ability to learn, but be realistic. You may have to start slowly with some elementary training. There is nothing to be ashamed of, if you are doing your best to learn and are making progress.

Learning to master academic skills is a slow process that requires considerable patience and repetition. For students that are underdeveloped, skilled instructors are required to handle personality and adjustment problems as well as specific remedial and study skills problems. Learning higher level skills and behavior patterns is a slow process. Be patient. It has been demonstrated that high achievement oriented persons set long rather than short-term goals, and they have a *future time* perspective (Weiner, 1972).

You can build self-confidence by attempting to be in control of your environment. Control requires managing your time so that you get maximum benefit from your efforts. Knowing how and when to speed read, underline texts, take notes, listen in class, prepare for and take examinations will help. You can develop study habits that will help you compete for good grades. Developing study habits that will help you, means that you will have to concentrate on certain skills like reading, taking notes, listening, and taking examinations. It is most important to know that these skills are learned behaviors that are necessary in academic life. Every student that goes to college learns these behaviors to some degree.

If you do not feel comfortable in the academic environment, you probably have not learned the behaviors that are rewarded. The academic environment is a social setting that rewards those students that have demonstrated certain skills and behaviors. Study habits are learned behaviors that help students to receive certain rewards, usually in the form of passing grades. It's *not* a good practice to be a "grade grubber" (students interested only in grades), because you may forget the primary reason for an education--to learn, develop, and mature intellectually. Virginia Voeks (1970), a psychologist, said that getting grades and getting an education are incompatible if you work primarily for grades. Students should understand that as they develop those skills and habits which constitute being educated, good grades will come automatically (Voeks, 1970).

Study habits include a series of skills (reading, writing, and studying) that will help you make acceptable grades. If you are serious about improving your study habits, better grades are possible. There is plenty of research evidence that supports this position, and you should know this research in order to help yourself.

Study skill problems may relate to the student's outlook or disposition. A student must first make a commitment to improve his or her habits and skills. This amounts to understanding that improvement is possible, but it takes hard work. You must be willing to be critical of yourself and work to improve your academic problems. You cannot expect quick improvement by some magical process. There are no short cuts to quality academic work, but there are some particular skills that will help. In every endeavor that humans undertake, they invariably pick up certain habits or characteristics that are learned. You can learn by doing and profit from the experience, but you must first want to improve.

Self-concept is an important aspect of your mental health (Bloom, 1976). You need to like yourself in order to like others. This fact is documented throughout the educational and psychological literature. Rollo May (1972), a practicing psychotherapist, said, "...that our attitudes towards others parallel our attitudes toward ourselves and that a basic love for ourselves is necessary if we are to love others..." (p. 138). To improve upon your self-concept, you can make accomplishments and be rewarded with the knowledge that you have made a contribution. It is a healthy signal to yourself when you work at a task and are rewarded; sometimes the reward is just in knowing that you did your best and have made some improvement. Be fair with yourself, if you try to improve and seem to be making progress, then keep at it. If you are making an honest effort to improve your skills, the chances are great that you will make some progress. Knowing that you have improved should be rewarding to you. Working at a task and being successful may help to improve your self-concept. There are no pat solutions or gimmicks known to improve self-concept. Indeed, it is difficult to even define the term. David Denton, a humanistic philosopher of education, said language can never be precise in the sense that it possesses complete objective meaning (Denton, 1970). The term self-concept represents a notion about human behavior that has been observed repeatedly but is difficult to see in people. "One cannot inspect the meaning of a symbol; it is grasped, understood, interpreted" (Yolton, 1962, p. 110).

It is known that making a contribution through hard work and being recognized is good for your mental health. The business of self-concept is important, because your behavior may be a reflection of your self-concept. If you can tolerate criticism and work to improve yourself, then your self-concept may be strengthened. Improving upon the way you feel about yourself, may give you self-confidence. You will come to think in a positive way about doing certain things, and this is healthy. Students who are scholastically superior usually have better mental health and more social accomplishments when compared to failing students (Voeks, 1970). This is the case at all educational levels according to Virginia Voeks (1970).

People who think they can succeed have a better chance than those who do not think they can succeed. Successful individuals possess a positive attitude about what they are doing. They also know what they are doing and why they are doing it. This may sound rather elementary and simple, but it should not be overlooked. "It is not at all simple to understand the simple" (Hoffer, 1955, p. 125). If you think you have the ability to learn, and *every* student does have the ability to learn, then you should start to develop your skills and your self-confidence. Only you can make it work through experience and practice. We learn by doing and working on a project. Often this knowledge is not clearly apparent. The experience of doing something cannot be easily broken down into gains in one particular area or another. Usually we come to realize what we have learned long after having had the particular experience. Most older persons have learned to live their lives from day to day without thinking about what contributed to their wisdom--accumulation of different experiences helps to develop wisdom of the world. Hard work also helps.

You should not be too concerned about yourself, if you are having problems and are doing something to improve. Knowing that you have an academic problem and are taking measures to correct it is a healthy sign. It is good to admit you need help when you have a problem. Many students overlook this most important fact; people who recognize that they need help are on the way to recovery. You *cannot* take steps to help yourself until you understand that you need help. Most colleges and universities have a study habits clinic or a counseling service for their students. In order to benefit from these services, you must be honest about yourself when explaining your problem. There is evidence that demonstrates those students who accepted their problem and made use of counseling were helped (Watson, 1961).

Do not be timid, fearful, or hesitant when in the presence of a counselor; they are there to provide you with help, so use their services. Most likely they have seen thousands of students, and you will not shock them. They cannot help you unless they know about your problem and your concerns. The first visit or two may be difficult until you get to know the counselor. Counselors have a concern for their clients, but they can only help those who want to help themselves. Counselors have no secret knowledge of the world that can make things right for you. You must be willing to work at your problem. The counselor only looks over your shoulder and makes suggestions. It is good to have someone to support your efforts, but do not become too dependent upon others. Remember the research evidence; good students tend to be independent and self-reliant.

Being well organized and knowing where you are going and why adds a dimension of stability to your academic appearance. Most professors or instructors are impressed by students that turn their work in on time and seem to be well organized and alert. In the classroom, instructors are continuously making mental notes about their students: does he come to class on time; does she turn her work in on time; does he take notes; does she appear to listen; does he miss class often. Every instructor does this to some degree in a conscious or unconscious manner. By making the effort to be well organized, you are giving a signal to the instructor that you do care about the course and are serious about learning something. People like to feel they are appreciated, and college professors are no different. Although many college profs may seem to be cold and indifferent, they are human beings with feelings concerning their students. Professors like to feel that their efforts may make a difference in a student's life. If students do not respond to a teacher's efforts, the teacher usually interprets this to mean the student does not care and therefore is an unworthy individual. Do not act as though you don't care, even though you may be bored or uninterested in the subject matter. Train yourself to be alert in class; you never know when something might come up that will interest you. It is a good policy to make the best possible appearance while in the classroom.

Flexibility is another problem students have regarding study habits. You need to be able to concentrate and pick up the important aspects of the course. Virginia Voeks (1970) contends that poor concentration and fatigue are caused by internal conflicts within the individual. Studying can be quite fatiguing if you are not committed. This means that if you attempt to study but are in conflict with yourself about whether you should be studying, then you will not get much accomplished. Identifying definite hours for study can help you to give your full attention to the specific study tasks (reading, reviewing, or writing); however, you also need to be flexible. Some subjects will require more time than others, and you will have to vary your study schedule frequently. The idea is to make the most of the time you do spend studying.

You should develop an instinctive sense or feeling about the course you are taking that dictates how much you need to do in order to get the grade you want. This so-called sense or feeling comes with experience in taking college courses. You should be able to size up the professor and the academic material presented, in order to know how much work you need to do. Talking to students who have taken the course before you can give you some insight. Knowing the requirements and allowing yourself enough time to complete difficult assignments is part of organization; however, you also need to be able to adjust or completely revise your schedule to meet deadlines. Do not establish a rigid schedule for yourself, but do allow time to complete all of your required work. Planning your study time is a delicate matter. Motivation will be required to see the tasks through to completion. Most professors are impressed with students that hand their work in on time. It has been demonstrated that superior students tend to register for college early, and once in college, they make plans to turn their work in on time. Superior students allow themselves ample time to complete required work.

Scholars have studied student achievement and often apply the terms over and underachievement. The term overachiever suggests a paradox. Can students achieve higher than they are capable of? One may be excused for using the term only when it is defined with emphasis on the validity of grades as measures of either capacity or performance. Overachievers are usually defined as students with a performance record much higher than their tested capacity would indicate it should have been (Brown, 1962).

Underachievers do not perform to their expected capacity. These students have not behaved in such a manner as to live up to their predicted potential. There are those who consider the underachiever a waste of valuable talent as well as being a drain upon the resources of educational institutions (Sattler and Neuringer, 1965). A more humanistic approach to underachievement allows that there is a problem with the individual that needs attention. According to Benjamin Bloom (1968), if every student had a very good tutor, they would be able to learn a particular subject to a high degree. Bednar and Weinberg (1970) reviewed 23 studies dealing with the effectiveness of various treatment programs for underachieving college students and found that highly structured and lengthy programs (over 10 hours) are most effective in improving grades. Bednar and Weinberg (1970) found that counseling aimed at the dynamics of underachievement in conjunction with an academic studies skills program was most effective. Bednar and Weinberg (1970) placed considerable emphasis on counseling and found the higher the therapeutic conditions (empathy, warmth and genuineness) the more effective the treatment.

The terms overachievement and underachievement may be considered to be imperfections in our ability to predict (Thorndike, 1963). Prediction falls short of perfection due to error of measurement. During the past 30 years there have been attempts to isolate the causal determinants of over and underachievement. Such variables as inadequate motivation, lack of defined goals, emotional instability, bilingualism in the home, specific intellectual disability, poor study habits, the sex role, and susceptibility to boredom have been investigated. Sattler and Neuringer (1965) did a literature review on over and underachievement and found there are no marked trends except for value orientations toward academic success (motivational factors).

Overachievers seem to be motivated toward academic success and underachievers are not. "Sex differences are few with the possibility that female underachievers are both more realistic in setting their aspiration levels and more ambivalent about their aims, while male underachievers are hostile and negativistic toward socially prescribed academic goals" (Sattler and Neuringer, 1965, p. 286). Todd et al. (1962) did find some sex differences between bright normal achievers and bright underachievers.

Golburgh and Penney (1962) cited research evidence that indicated underachieving students tend to be hostile toward parents and associated authority figures. Powell and Jourard (1963) cited research evidence that indicated underachieving students to be insecure, dependent, immature, and unable to form warm interpersonal relationships. Bednar and Weinberg (1970) also cited research studies that identified underachievers as being emotionally immature, negative toward authority with limited reading skills, and poor study habits. Astin (1964) conducted an interesting study with 6,660 high aptitude college students (4,472 boys and 2,188 girls drawn from the 1957 National Merit Scholarship competition) over a four-year period. Astin (1964) found that students who drop out of college come from lower socioeconomic backgrounds, have lower ranks in high school, plan initially to get lower college degrees, and apply for relatively fewer scholarships than do students who do not drop out. When considering personality measures, it was suggested that dropouts tend to be more aloof, self-centered, impulsive, and assertive than nondropouts (Astin, 1964).

Grace (1957), using a personality inventory (the Minnesota Multiphasic Personality Inventory - MMPI), indicated that dropouts tend to be more irresponsible and dependent than students who remain in college. Ausubel (1968) reported on research comparing educationally successful and unsuccessful children and found the successful have better study habits, exhibit more self-control, have more realistic levels of aspiration, and excel in such personality traits as dependability, ambition, investigativeness, and persistence.

There is considerable evidence that negative interest or lack of motivation are primary contributors toward low scholarship (Tiebout, 1943; Morgan, 1952; McClelland et al., 1953; Brown et al., 1954; Maslow, 1954; Rosen, 1956; Kerns, 1957; Brown, 1960; McDonald, 1961; Wellington and Wellington, 1963; Finger and Schlesser, 1965; Kornrich, 1965; Atkinson and Feather, 1966; Moore, 1970; Maxwell, 1971; Brown, 1972; Evans and Anderson, 1973; Wankowski, 1973; and Atkinson and Raynor, 1974). Some specific characteristics attributed to over and underachievement in the research literature will be mentioned. You should be interested in this research, because the characteristics attributed to overachievers are similar to those traits found among good students. The underachievers have characteristics that are similar to students not making passing grades. These studies have yielded consistent findings.

Morgan (1952) found overachievers to be more mature, serious, aware of others, dominant, self-confident, and had a motivation to achieve. Underachievers were identified by negativism, less interest in reading, withdrawal from competition, high on the delinquency scale, and less interest in academic motivation. Underachievers are characterized by withdrawal behavior and by less social, work-oriented interaction with peers (Perkins, 1965). Shaw et al. (1960) found underachievers to have negative self-concepts.

In terms of attitudes, Kerns (1957) found that overachievers tended to go to college for intellectual reasons, and underachievers attend for negative reasons, such as getting away from home. Among college students, underachievers have stronger interests in social activities than intellectual activities, and the opposite is true for overachievers. Wellington and Wellington (1963) and Finger and Schlesser (1965) also found that underachievers have negative attitudes toward college that seem to block academic striving.

Maxwell (1971) and Kornrich (1965) suggested that underachievers are self-deprecatory, lack a clear system of goals and values, are vulnerable to disparagement by others, have immature relations with parents, lack insight into their problem, and are likely to be anxious and depressed. Tiebout (1943) found underachievers to have similar characteristics. In summarizing the general characteristics of over and underachievers, Tiebout (1943) found overachievers to be candid and underachievers to be defensive. Todd et al. (1962) and Gelso (1967) found evidence that underachievement is much more a characteristic of males than females; however, from adolescence to adulthood, males exhibit I.Q. gain more frequently than do females (Bradway and Thompson, 1962). Evans and Anderson (1973) found that underachievement was related to values and experiences associated with the culture of poverty, specifically low self-concepts of ability, fatalistic, present-time orientation, and non-democratic child rearing experiences. Wankowski (1973) found the successful student to be phlegmatic, relatively independent and versatile, unruffled by demands or pressures, and tolerant, though not uncritical of tutors and peers. Atkinson and Raynor (1974) found that underachievers are underachieving due to motivational problems, and that ability and motivation interact to account for different achievement levels. Brown et al. (1954) found that the low achieving college student is characterized by a lack of decisiveness of action, a tendency to procrastinate, and an unwillingness to conform to academic requirements and routine regulations. Brown et al. (1954) made the assumption that the poor scholarship student does not necessarily score lower on psychological tests designed to measure intelligence, but very often factors of interest and motivation are primary contributors towards low scholarship.

Attempts to explain underachievement in terms of lack of motivation have concentrated on primary socialization practices (early child rearing) within the family (McClelland et al., 1953; Rosen, 1956; Slocum, 1956; Rose and D'Andrade, 1959; Holland, 1959; Brown, 1962; Sattler and Neuringer, 1965; and Evans and Anderson, 1973). McClelland et al. (1953) summarized five years of intense research into the nature of achievement motivation and found that achievement motives develop in cultures and in families where an emphasis is on the independent development of the individual. Low achievement motivation is associated with families in which the child is more dependent on his parents and subordinate in importance to them.

Rosen (1956) found that achievement motivation appears to be the result of two types of family socialization practices: achievement training and independent training. Achievement training involves parents setting high goals for the children and communicating to them that they expect evidence of high achievement. Independence training involves the parents encouraging self-reliance by granting their children enough autonomy to make their own decisions and to accept responsibility for success or failure. Slocum (1956) found family background, especially parental interest in and aspirations for the student to be influential in withdrawal and persistence in college. It has been found that the parents of bright, high achievers engage in more sharing activities and are more approving, trusting, and affectionate with their children; they encourage achievement but do not exert pressure (Morrow and Wilson, 1961). Katz (1967) describes low achieving Negro boys as follows: "What they seem to have internalized was a most effective mechanism of self-discouragement...The child, in a sense, has been socialized to impose failure upon himself" (p. 164). Ausubel (1968) has indicated that culture, social class, and family have many ways of influencing attained level of intellectual development. Rollo May (1972) said:

> The confidence that one has worth is normally picked up first from attitudes of a mother or mother-surrogate toward the infant, and is then cultivated in the family by loyalty to the infant. As the child grows this initial feeling is reinforced by persons outside the family in their appreciation for him and his potentialities. Later, the more mature human being seems to keep within his memories, to refer to in difficult times, the images of those people who have believed in him. When I was in college I found the experience of having some adult believing in me crucially important; and at times thereafter in my life when I was faced with fateful decisions, I found myself casting about to fasten upon one of these persons (p. 139).

May (1972) has indicated it is important for students to have someone to turn to when they need help. Parents and teachers should be interested in May's comment, because they might be able to help students through some difficulties. Rehberg and Westby (1967,

p. 371) found that "...parental encouragement comes close to being a necessary condition for the continuation of education beyond the high school level in all strata..." Ecouragement by teachers in the form of praise follows high effort exertion by students (McMillan, 1977).

Holland (1959) has found that motivation, as it related to achievement and underachievement among gifted persons, is a specific facet of the general problem of socialization. Brown (1962) likewise found that motivational factors are related to dispositions in the individual that may have been formed during primary socialization. Sattler and Neuringer (1965) found evidence that suggested the influence of the family environment is most significant in identifying over and underachievers. Heckhausen (1967), a German psychologist, reviewed the literature on the development of achievement motivation and found that with success the child experiences pleasure about competence, and with failure experiences shame about incompetence. "The most impressive type of 'achievement behavior' during the first three years of life is the persistence in sensorimotor activities involving objects (for instance, in erecting things, stringing pearls, painting)" (Heckhausen, 1967, p. 142).

Although motivation may be associated with early child rearing practices, it is possible to learn skills and behaviors through the process of secondary socialization (learned adult behavior). "Socialization is never total and never finished" (Berger and Luckmann, 1966, p. 137). This means that we are changing as social relationships change. You can learn from a different social environment. Being able to master certain skills may stimulate interest and promote motivation for the subject. It is normal to like to do those things we do best. Once you have mastered an academic skill and can perform at an acceptable level, you may find that you enjoy academic work and the associated social climate. It has been suggested that persons will judge their own ability to be high, if they are able to succeed on problems of great difficulty (Harvey and Kelley, 1974). This relates to attribution theory and attribution studies which may be an opening wedge into an important but little explored aspect of motivation--sense of competence (Kerlinger, 1977). Those who undertake difficult tasks and succeed may become relatively more motivated individuals. Wise teachers understand this process.

There is some evidence that suggests underachieving students have the best chance to succeed in small, coeducational, residential colleges (Feldman and Newcomb, 1969). Astin (1977b) suggests that students in smaller institutions are more likely to participate in honors programs, to interact with faculty, to get involved in extracurricular activities, and to achieve in areas such as leadership, athletics, and journalism. Feldman and Newcomb (1969) claim that small residential colleges most frequently offer the best conditions to exert desirable and uniform effects on student development. Large institutions of higher education expect students to be motivated, mature, and capable of getting along with the academic bureaucracy. On the other hand, small residential colleges provide a collegiate atmosphere without a large bureaucracy. The small residential colleges may offer more individual attention to students than large universities and may appear to be more friendly and appealing to the student. Students and parents should give careful consideration to the type of academic institution they plan to invest their time and money in. There is evidence that some students function better in particular types of academic environments depending upon their personality traits (Lavin, 1965).

The research on commuter college students should be understood if help with study skills is to be applied. In general, commuter students, when compared to residential students, have poorer mental health and more curricular adjustment problems. Drasgow (1958) reported that commuters do not persist in college as long as residential students. Commuter students show less maturity in goals and aspirations, perceive less relevance in their course work, and demonstrate less responsibility in satisfying academic requirements (Graff and Coeley, 1970). Graff and Cooley (1970) indicated that commuter students manifested a lack of self-confidence, nurtured feelings of failure and insecurity, and displayed excessive anxiety when confronted with petty annoyances, in comparison to resident students. In regard to achievement, study skills, organization and interpersonal relations with peers, no differences between resident and commuter students were found. Harrington (1972) questioned whether the deficient skills of commuters can be effectively remediated within the present system of higher education.

Minkevich et al. (1971) found that high school students electing to commute to college, as compared to those selecting metropolitan four-year colleges and universities, tended to be more dependent on others, more frequently to let others make decisions for them, often sought suggestions from others, and avoided the unconventional. Students electing four-year institutions were more inclined to form strong attachments, to share things with friends, to form new relationships, to do things with a friend rather than alone, and to participate in groups.

In regard to study patterns, Stark (1965) found that commuter students were often slower to alter ineffective study habits formed in secondary schools. Stark (1965) recommended the establishment of special remedial programs for commuter students. It seems there is a double problem for colleges without resident facilities. Their students have lower aptitude scores, and they demonstrate attributes associated with non-intellectual activity. One might question what is being done to help students with these unique characteristics. Parents should give consideration to a residential college, although it means more expense. Chickering (1974) has suggested that recent expansion of commuter admissions was a poor idea. "In almost every respect, residents benefit more than commuters from their undergraduate experience. They not only show greater changes in personality and attitudes and become more involved in campus life, but they are more likely to persist for four years, which in turn maximizes their chances of implementing career plans" (Astin, 1977b, p. 42).

Students, parents and faculty should know the available study skills research in order to plan for post-secondary education programs. Planning for an individual's future is most important and should be accomplished with as much information about the individual and the environment as possible. Individuals that are handicapped with insufficient academic skills can be helped, and there are research studies that indicate a study skills treatment can be beneficial. You should understand the research accomplished with high-risk, underdeveloped students in order to know the difference between good and poor study skills programs. The mere fact that students enter a study skills program is no guarantee that they will be helped. Unfortunately, many study skills programs cannot offer a shred of evidence to indicate they are helping students stay in college.

CHAPTER II

Research With Underdeveloped Students
Using A Study Habits Approach

You should be encouraged to know that study habits training has made a difference in helping high-risk students to make acceptable grades in college. Usually the combination of a remedial course such as reading along with study skills training is most effective. It is important to remember that the individual student must first be determined to improve in order for the study skills treatment to help. The student must make a commitment to help himself or herself.

There are eight interesting studies that claim success with the application of a pre-college study skills/remedial course (Maxwell, 1963; McConihe et al., 1964; Egeland et al., 1970; Christ, 1970; Miller and Stillwagon, 1970; Pepper, 1970; Kling, 1972; and Shaffer, 1973). You should be interested in this research, because it indicates that strong remedial/study skills programs can help underdeveloped students. Maxwell (1963) reported on a pre-college summer program at the University of Maryland. In the summer of 1961 a program was designed to enable low achieving applicants to test their ability to perform college work. Students whose high school averages were below C and who scored in the bottom 30 percent on University of Maryland freshmen norms (American Council of Education Psychological Test, Cooperative English or Cooperative Algebra) were required to attend a special six week pre-college summer session in order to qualify for continued enrollment. This program was designed to maximize the student's chances of academic success. All students were required to enroll in freshman English and to elect either mathematics, sociology, or American government. Academic success was defined as passing both courses and achieving at least a grade of C in one of them. A battery of reading and study sills tests were administered at the beginning and end of the summer session. An individual program was prepared for each student indicating a starting level and the sequence of activities to follow in order to improve upon their weakest area. All students were required to attend the first reading and study skills laboratory; however, subsequent attendance was voluntary. If students chose to attend the reading and study skills laboratory, they were required to work on their weakest area for one week; after that they could work on any of the skills or materials they preferred. Three hundred fifty-six students registered for the program, and 176 attained grades enabling them to continue.

Maxwell (1963) found the academically successful students made significantly higher initial scores than the failing students on reading rate, vocabulary, and comprehension tests. Both groups (failing and passing) showed significant improvement in vocabulary and study skills habits and attitudes. Student reactions to the program were highly favorable as revealed by a questionnaire administered with the post-tests. The successful students were also found to be more flexible in their use of the laboratory materials and worked on more varied skills than did failing students.

McConihe et al. (1964) reported on a preparation for college, non-credit program conducted by the Pscyhological Research Services of Western Reserve University. This program was a "how-to" course providing information on how to take notes, how to listen to lectures and how to study. This program was conducted over a four-week period for any prospective college student that wished to take it (there were no controls for motivation or ability). During the summer of 1961, a total of 117 students enrolled in the preparation for college course. The results indicated the program had a positive effect upon some skills related to performance. Reading measures showed considerable improvement in each of three areas (vocabulary, speed of comprehension, and level of comprehension). A measure of skill in written expression did not show improvement. Questionnaire items regarding study attitudes showed a distinct change emphasizing initiative and responsibility. McConihe et al. (1964) contend that good students: make improvement, get involved with what they are learning, are devoted to their work, set high standards of performance, and utilize realistic planning strategies. The overachieving student is characterized as a dedicated, devoted individual who is willing to spend the required amount of time and energy completing assigned tasks.

Egeland et al. (1970) reported on project Upward Bound. This was a pre-college enrichment program sponsored by the Office of Economic Opportunity for high school students from low-income families. Its purpose was to generate the skills and motivations necessary for college success among students from low-income backgrounds and inadequate secondary school preparation. "A typical Upward Bound program enrolled 75 students who participated in two phases; a summer phase in which the student spent eight weeks in residence on a college campus where he experienced a fairly intensive, full-time educational program, and a second, or follow-up phase, in which he received some additional support (for example, tutoring and counseling) during the following academic year in his own high school" (Egeland et al., 1970, p. 375). In June 1967, approximately 6,000 Upward Bound students were graduated for high shcool, and about 80% were admitted to some form of higher education. The Upward Bound rate of enrollment in an institution of higher education was 68% compared to 58% in a matched non-Upward Bound control sample. No information about persistence was reported.

In 1970, Christ reported on a pre-college summer reading/study skills laboratory that attempted to bridge the reading/study transition from high school to college. Christ's program was offered at Loyola University of Los Angeles for five years prior to his report (Christ, 1970). Christ's program was based on these assumptions:

1. Learning begins where the student is.
2. Learning how-to-learn can be learned.
3. Learning must be meaningful and goal-oriented.
4. Learning is a process.
5. Learning is not always easy, nor is it always fun.
6. Learning can be personal regardless of numbers of students.
7. Each student is unique.
8. Each student is a fellow human being.
9. Students can and do learn by themselves.
10. Students do learn from each other.
11. Students learn at different rates.
12. Students learn in different ways.
13. Diagnosis, referral, and follow-up are synonymous with counseling.

14. Computerization need not be dehumanizing.
15. Individual learning can be economical.

Study laboratories were held three hours a day, five days a week, for four consecutive weeks. Typical group activities included lecture-discussions on learning, study/reading, high school to college adjustment, critical reading, taking notes, outlining, and underlining techniques. Christ stated that the reading/study skills course does make a difference, but he did not present any empirical data.

Miller and Stillwagon (1970) reported success with a reading remediation program between high school and college with underachieving students. Their program lasted three weeks. The American College Test (ACT), Edwards Personality Preference Schedule, Missouri College English Placement Test, Nelson-Denny Reading Test, Strong Interest Inventory, and the Wechsler Adult Intelligence Scale were administered for the purpose of planning an individualized program. The group as a whole had a predicted grade point average (GPA) of 1.5 based on high school grades and ACT scores, but they achieved a GPA of 2.2 in summer school and 2.0 in the fall. Miller and Stillwagon (1970) stated that programs of this sort, that are aimed at the underachiever, must be structured in such a way as to encourage and provide an opportunity for the students to help themselves.

Pepper (1970) reported success with a reading/study skills course using students who would not have been admitted to Wayne State University based upon their Scholastic Aptitude Test (SAT) scores and high school GPA. Students who applied for admission but did not meet admissions criteria were invited to enter an experiemental summer quarter program. All students were required to take freshman English, either social science or political science, and a non-credit reading and study skills course. The class work was supplemented by academic advising, vocational and educational counseling, financial aid service, and tutoring. A total of 212 marginal students were enrolled in the summer classes, and 155 later successfully completed four quarters of academic work in their first year. Informal evaluations by students and instructors indicated that the reading and study skills training made a positive contribution to the academic adjustment of these students. The Brown-Holtzman Survey of Study Habits and Attitudes (SSHA) was administered at the beginning of the study skills course, and individual profiles were returned to the students. These profiles served as a basis for discussion of the role of attitudes, motivation, and study skills required to be successful in academic work.

Kling (1972) from Rutgers University claimed to have made the first empirical evaluation of a summer program for socially disadvantaged incoming freshmen. A two-week summer reading and study program was developed for 61 disadvantaged incoming freshmen; 84 percent were black. In the morning mathematics was taught, and in the afternoon reading skills and study skills were emphasized, supplemented by work on library utilization. The core program was designed to change basic attitudes and approaches toward academic work, particularly reading skills. Success was demonstrated by post-test gains on vocabulary, reading comprehension and reading rate.

Shaffer (1973) reported on an experimental program that selected 89 disadvantaged minority high school graduates to attend a special preparatory program before entering San Fernando Valley State College in the fall semester. This program was conducted on the campus for a period of eight weeks. During this time, the students attended classes and tutoring sessions designed to improve their academic skills and to orient them to the college environment. Eighty-nine students were selected from those attending an Educational Opportunities Program (EOP). The selected 89 students had lower high school grades than the larger EOP group. Only five of the 89 students would ordinarily have qualified for regular admission as freshmen. The Cooperative English Reading Comprehension Test (Form 1C), the Brown-Holtzman Survey of Study Habits and Attitudes (Form C), the Bennett Test of Mechanical Comprehension (Form BB), the Employee Aptitude Survey, the Visual Speed and Accuracy of Space Visualization Tests, and the Strong Vocational Interest Blank were given and used for general educational guidance and specific assistance. High school grades and SAT scores were also used. Two years later tabulations were made on their college performance (number of semesters they were in attendance and academic credits earned). Eighty of the 89 enrolled as freshmen, and 35 were eligible to continue their education after attending for four consecutive semesters. The results indicated that student performance on the Brown-Holtzman SSHA most consistently differentiated between upper and lower criterion groups. The highest correlations obtained in the study, for both males and females, were between SSHA Educational Acceptance scores and the criterion of the total number of college credits earned in the two-year period. In another study Anderson and Kuntz (1959) also found a high correlation between study habits and grades.

These eight studies (Maxwell, 1963; McConihe et al., 1964; Egeland et al., 1970; Christ, 1970; Miller and Stillwagon, 1970; Pepper, 1970; Kling, 1972; and Shaffer, 1973) suggest that progress is possible when you work with high-risk students using a study skills/ remedial course. Progress can be made, if the student enters a sound study skills/remedial course and sees it through to completion. There are many study skills courses being offered that are poorly administered with non-professional personnel. You should be on guard *not* to get involved with a study skills course that cannot demonstrate effectiveness. Too often study skills courses are run by individuals that do not know the literature on student characteristics or study skills training. You might ask if there is evidence available that demonstrates effectiveness of a study skills course in question. You would be wasting your time by getting involved with a non-professional, poorly administered study skills/remedial course. It may be difficult to find a sound study skills/remedial course in higher education that can produce research evidence indicating they can help the high-risk student. Many institutions will make the claim, but few will have the evidence. Administrators operating remedial programs with no substantive evidence or student progress are derelict in accomplishing institutional goals.

If you have an understanding of the research dealing with high-risk students, you can make an intelligent choice about placing a student in such a course. Parents should be particularly aware of the research evidence indicating what will help and what will not help. Parents should also be able to determine if their children need help in a study skills training course by observing behavior patterns.

There are studies that have attempted to improve upon indicated low ability with treatments applied during the course of college work (Shaw, 1955; Blake, 1956; Ikenberry et al., 1966; Rickabaugh, 1969; Cartwright, 1970; Rosella, 1970; Cartwright, 1971; Ritter, 1971, and Kaye, 1972). Shaw (1955) reported on an attempt to evaluate the effectiveness of a study skills program at the University of Wyoming from the fall quarter of 1949, through the spring quarter of 1951. A total of 153 students with a mean GPA of C-minus were enrolled in the study skills course (58% were on academic probation). After the study skills course their mean GPA was slightly better than an average C grade (an improvement of .56 of a grade point on a 5 point numerical value system). Results from an evaluation questionnaire indicated that 95% expressed the opinion that the course was of considerable value to them. Blake (1956) found that requiring students on academic probation to take a study and reading skills course was beneficial. Blake concluded that compulsory training given students does help many to achieve their immediate academic goals.

Ikenberry et al. (1966) reported on a training program in reading/study skills with a reduction of the academic credit load for 330 students, selected from the 1964-65 freshmen class of West Virginia University. These students had a predicted GPA of 1.99 on a 4.0 scale. Criterion measures were GPA and withdrawal rate per semester. Students were randomly assigned to four groups: 1) a reading/study skills class with reduced credit load, 2) a reading/study skills class with no reduction in credit load, 3) a reduced load with no special class, and 4) a control group with no special class and no reduction in credit load. At the close of the first semester each of the criterion measures showed a significant difference in favor of those groups taking the reading/study skills course. The group with only the reduced load achieved at a level below the other three groups, and had the highest rate of withdrawals. Significant interaction effects between the special course with reduced credit load and without reduced course load were shown. The Brown-Holtzman SSHA Inventory, which was used as a secondary variable, was related to achievement according to Ikenberry et al. (1966). Rickabaugh (1969) reported significant improvement on GPA using students on academic probation at the University of Utah by applying a study skills treatment for one semester.

Cartwright (1970, 1971) reported success with a study habits/reading remediation course during college sessions. Cartwright (1970) said the study skills section was extremely important. In 1971, Cartwright reported on a one year required study habits/reading program with students who were reading at the ninth grade level or below as freshmen. At the end of one academic year, gains ranged as high as five years eight months and as low as two months (Cartwright, 1971).

In 1970, Rosella reported on research with high-risk students at Bucks County Community College, Newton, Pennsylvania during the 1969-70 academic year. Freshmen who ranked in the bottom 40% of their high school graduating class and had Scholastic Aptitude Test (SAT) scores below 800 with a verbal score below 400 were informed that a reading and study skills program was available. Of the 82 students who met the criterion, 41 enrolled and 33 completed the entire course. The course involved two hours of instruction each week in reading and study skills, plus one additional hour of independent work combined with educational and vocational counseling. Students who did not attend the study skills group were used as the control group. Both groups were given pre and post-tests using three subscales of the Cooperative Reading Test (vocabulary, speed of comprehension) and the student attitude subscale of the Brown-Holtzman Survey of Study Habits and Attitudes (SSHA). A comparison was also made of semester grade averages and English grades. The experimental group had significantly higher grades than the control group. They also had improved scores in reading speed, reading comprehension and the student attitude subscale of the Brown-Holtzman SSHA. It is encouraging to know that some two-year institutions of higher education are developing quality study skills programs that can demonstrate their usefulness. It is most likely that more students in two-year institutions need study skills and remedial help than students in four-year institutions. Measures of intellectual orientation clearly differentiate among high school graduates who enroll in two-year colleges and those who attend four-year colleges. Students attending two-year institutions are lower on measures of intellectual orientation when compared to students attending four-year institutions (Trent and Medsker, 1968).

Ritter (1971) conducted a study skills program at the University of Manitoba, Winnipeg emphasizing: 1) listening and taking notes, 2) underlining, 3) skimming, 4) making study sheets in outline form, and 5) taking examinations and writing term papers. This special course was conducted for one academic year with 149 upperclass students with a 2.09 mean GPA. At the conclusion of the special course, the mean GPA was 2.39 (statistically significant at the .01 level of confidence). No controls were used for ability or motivation (those who requested the course were allowed to take it).

Kaye (1972) reported on a required study skills/counseling program for failing college freshmen at the University of Connecticut. Eighteen matched pairs of students for control and experimental groups were randomly selected. They had a mean GPA of 1.3. A letter requiring participation was sent to freshmen assigned to the experimental group. The treatment was applied the second semester. The experimental group was significantly superior to the control group on mean GPA (2.1 compared to 1.4). Kaye (1972) stated the academic system should assume more responsibility for the problem of academic failure by requiring a study skills treatment program geared to the student who fails during the freshman year.

Paulson and Stahmann (1973) reported on the characteristics of high-risk students who did graduate without any special treatment given. The so-called high-risk alumni of the University of Iowa were characterized as being dominant, enthusiastic, sociable, and they had strong needs to achieve and secure high status. This research was conducted using a questionnaire and Holland's Vocational Preference Inventory. Paulson and Stahmann (1973) said more research is needed to determine the motivational factors involved in college selection by high-risk students. They implied that institutions involved with high-risk students need to operationally assess the students' behavior and individually work out a program to help each student acquire the habits and skills that will enable them to succeed.

Gelso and Rowell (1967) reported on a study to determine if there are significant differences between students who perform well enough in a college on-trial program to be admitted as regular students but do not persist. It was found that non-persisters were less sure about the future and the role which college would play in it, and they tended to schedule and carry out their daily activities with less effectiveness than the persisters. Non-persisters also displayed less ability to get along with their instructors and colleagues, as reflected principally in a higher degree of mistrust and disrespect toward their instructors, and less cooperativeness with their associates. Gelso and

Rowell (1967) concluded that the non-persisters were not sure about college and were very undecided about the direction their lives should take in the future.

Through interviews with students having academic problems in the first year of college, Lesnik (1972) found the basic problems to be inefficient study skills or a deficient vocabulary in the discipline being studied. The interviews revealed a wide proliferation of problems ranging from those which directly impinged on study skills (such as inadequate study techniques, scheduling time, word-by-word reading, and poor comprehension) to indirect problems such as the college curriculum, college instruction, and poor self-esteem. In many cases the direct problem was related to study behavior, but it could not be fully understood apart from the total behavior complex. Motivational factors explaining academic achievement are varied, complex and difficult to understand (Lesnik, 1972). Lesnik (1972) said lack of motivation was expressed in some form of resistance to becoming involved in studies. This is a most important observation that students, parents, and teachers should be aware of in order to help yourselves and others.

In a thoughtful article, Heist (1960) stressed the need for variety in the facilities, programs, and educational procedures of higher education. In theory there should be institutions that specialize in working with high-risk students as well as other varieties of students. The question about the "correctness" of choice of college for entering students should be asked much more frequently, said Heist (1960). Richards et al. (1966) recommended that a wide variety of colleges be established to cater to the needs of particular types of students. Presumably an appropriate match between student and college would facilitate academic development for a variety of different student types. James M. Richards and Paul Heist, among other educational researchers such as Charles F. Elton and John L. Holland, believe the proper environment can be controlled to enhance academic development for various student typologies. The problem for most institutions of higher education is that they do not have enough *professionally* trained people to make student evaluations, then conduct follow-up treatments with adequate remedial/study skills courses.

Most study skills instructors have had little professional training in the specific area of study skills and habits. They usually develop their knowledge by on the job training. Many study skills courses are conducted by individuals with little or no knowledge of the research literature on student characteristics or specific study skills strategies required for individuals with unique problems. Prior to getting involved with a study skills/remedial course, you should know the credentials of the instructors and ask for evidence indicating they have been successful in the past. A variety of individuals from different disciplines are involved in teaching study habits--English, Psychology, Education, and mixtures calling themselves interdisciplinary specialists.

College administrators with an open door admission policy should study the characteristics of their student population, and know how best to serve a heterogeneous student body. Programs without professionally qualified instructors in reading and study skills are of little value. Benz (1970) reported on a reading/study skills program using academically successful students as tutors and found *no* improvement in the experimental group of low achieving freshmen.

It has been found that the greatest gains academically were produced by students with relatively high ability. These students tend to show greater improvement in more areas than the unsuccessful groups when a study skills/remediation course is applied (Maxwell, 1963 and Lee, 1964), demonstrating that the effectiveness of a special remediation program is less difficult when using students with relatively high measured ability.

The literature dealing with programs for high-risk students is limited; however, the literature does indicate that high-risk students can be helped through the application of a study skills/remediation program. These rather detailed research reports should indicate to you that academic success is possible, if you make serious efforts to improve upon deficient study skills. It should also be noted that as you develop skills for studying and operating in the academic environment, you will gradually feel more comfortable. The academic environment will seem to be less threatening to you as you mature intellectually. You will notice that you have more control over events when your self-confidence is up. An independent, self-assured attitude may develop as you become more confident about ability. This will be a gradual change. The longer you persist in academe, the more successful you may be. It takes time to adjust to a new environment and coming into college from high school or returning to college from the world of work is a big adjustment. *Take things one step at a time and do the very best you can.* Being able to defer immediate gratification for a long range goal is an indication of good mental health. Knowing that you have a study skills problem and are willing to seek help is also an indication of good mental health and maturity.

You should know your limitations and strengths in order to plan for a productive future. If you think you need help with study skills, identify your problems.

CHAPTER III

Identify Your Study Skills Problem

A good indication of a study skills problem is poor grades. Associated with poor grades are feelings of insecurity, hostility, and a bewilderment of the academic environment. Superior students feel secure, comfortable, and are generally well adjusted in the academic environment, because they are utilizing skills that reward them with good grades and acceptance. Good students are liked by their professors and accepted by the academic community. It is also true that students making an effort to better themselves academically are liked and accepted by their professors. Professors will often go out of their way to help students that are sincere about improving their academic skills. Professors like to think their help can influence an individual in a positive direction. Most teachers at all levels feel this way about their work. One of the intangible rewards of teaching is a good feeling about your students--knowing that you have helped a student.

There has been considerable work done by professionals in education and psychology to identify or predict students who will be successful in college, based primarily on their performance in high school. Predicting the grades high school graduates will make in college has been refined into a rather precise science. Many professionals engaged in prediction studies have found that high school grades in combination with a standardized ability test will result in a reasonably accurate indication of grades that will be made in college. This technique permits counselors to present the probabilities of success to their clients (high school seniors). Often the difficulty of the curriculum and the demands of the institution are taken into consideration when constructing expectancy tables. Students attending Harvard would be expected to have higher aptitude scores and high school grades than students going to a public community college.

Research conducted to predict grades and provide an indication of the possibilities of success in college is most interesting. There have been numerous studies conducted to predict student achievement in colleges and universities. Variables used are high school grades, aptitude scores, personality measures, and study habits inventories. Attempts have been made to identify the concept of motivation through personality measures and study habits inventories. It is generally accepted that aptitude variables or so-called intellective factors account for one-quarter to one-half of the variability in academic achievement (Crawford and Burnham, 1946; Lavin, 1965; and Khan, 1969). Recently attention has been given to non-intellectual factors, such as motivation, study habits, and personality characteristics. Non-intellective predictors have been used to predict intellective criteria to a greater degree than was previously true (Yonge, 1965, and Richards et al., 1967).

Fishman (1962) stated it is conceptually useful to distinguish between intellective and non-intellective predictors. Intellective predictors include aptitude and intelligence test scores, achievement test scores, and high school rank or high school average. Non-intellective predictors include personality and motivational tests, interest inventories, interviews and personal ratings, biographical information, and study habits inventories.

The early studies on prediction used intellectual predictors (May, 1923; Odell, 1927; Harris, 1940; Crawford and Burnham, 1946; Stuit et al., 1949; Fishman and Pasanella, 1960; Bloom and Peters, 1961; and Lavin, 1965). In 1923 May, who reported on the prediction of academic success, defined the criterion of academic success to be grades. It was assumed that the quality of intellectual work was measured in grades and quantity was measured by semester hours. The only defense for such assumptions is that these measures were available and generally accepted by the academic community. May (1923) used I.Q. scores as the independent variable and found that this type of intellectual measure is significantly related to academic success (GPA).

A massive review of factors affecting college grades was reported in 1940 by Harris (reviewed 328 studies from 1930 to 1937). Harris (1940) found the essential factors in student achievement to be ability (scholastic aptitude), effort (degree of motivation), and circumstances (personal, social, economic, or academic). Fishman and Pansanella (1960) located 580 studies on college prediction between 1949 and 1959 and found the most usual predictors to be intellective (high school grades and scores on standardized aptitude tests).

Rose and Trent (1973) reported that previous grades are the predominant variable for predicting future academic achievement. Ikenberry (1961) found that the most powerful indicator of persistence in college was an intellective function (academic aptitude and achievement records such as previous high school work and work in college). Baird (1969) concluded that past achievement is the best predictor of future achievement. Holland et al. (1967) did research with 12,432 college freshmen in 31 colleges and universities and found the best predictor of college academic accomplishment to be high school grades or some combination of high school grades and the American College Test (ACT) scores. Katz and Norris (1972) found that scholastic aptitude scores plus previous course work offer the most efficient predictors for guidance counselors. Astin (1971) used high school grades and aptitude scores to compose selectivity tables for 2,300 American colleges (to be used with high school seniors thinking of college).

Non-intellective predictors have been used to predict variability beyond that accounted for by intellective factors. Research conducted with personality factors as predictors has been somewhat disappointing (Lavin, 1965, and Brown, 1972). Elton (1970) reported no significant differences in personality traits between college age students and non-students. Cattell et al. (1966) have reported low correlations between student achievement and scores on various personality scales. Burnham (1959) stated the gain in the multiple correlation upon adding a personality test score to one of the usual predictors (high school grades or aptitude tests) is usually less than .05.

Rutkowski and Domino (1975) claim to have found an interrelationship between study skills and personality variables using the Brown-Holtzman Survey of Study Habits and Attitudes (Form C) and the California Psychological Inventory. Rutkowski and Domino (1975) said there is a definite and pronounced relationship between study skills variables and personality variables. The student having good study skills (habits and attitudes) also has a personality profile that is generally favorable, with particular strengths in those scales that measure socialization, maturity, responsibility, and those that measure achievement potential and intellectual efficiency. The student who tends not to procrastinate is apt to be of an active, participative temperament and is conscientious, responsible, shows self-control and tolerance, is diligent, well organized, resourceful but rather cautious and methodical (Rutkowski and Domino, 1975).

Within the area of personality tests, subscales that attempt to identify motivation for academic work have been found to be associated with one and two-year GPA (Donnan, 1968 and Cattell and Butcher, 1968). Donnan (1968) found that the achiever personality scores from the Opinion Attitude and Interest Survey were about equally efficient in predicting GPA as were the verbal and mathematics portion of the Scholastic Aptitude Test (SAT) and high school ranking. Donnan (1968) used 375 students at the University of North Carolina.

Cattell and Butcher (1968) claim that 25% of the variation in academic achievement is due to differences in motivation. In 1960, Holland reported on prediction of college grades from personality variables in an attempt to provide information for the development of a theory of academic achievement. Holland (1960) used 277 talented students and found non-intellective variables such as superego, persistence, and deferred gratification are useful in predicting and understanding the nature of the academic achiever. Berman and Eisenberg (1971) found that the correlation of personality characteristics with achievement shows a number of traits are relevant. They seem to be in the area of motivation, sense of well being and independence. Weiss et al. (1959) reported that the combination of motivation measures with academic ability measures yielded a better prediction of GPA than academic ability measures alone. In conclusion, Weiss et al. (1959) stated that a combination of ability and motivation measures seem to be a powerful predictor of academic performance.

Finger and Schlesser (1965) presented evidence that suggests a student's academic motivation can be identified by the kinds of attitudes which have developed regarding the educational institution. An attempt to describe academic achievement motivation was made by Finger and Schlesser (1965) using their Personal Values Inventory (PVI). This dimension was not related to ability as measured by an aptitude test but did predict college persistence. Finger and Schlesser (1965) have shown that the PVI accounts for as much variance in grades as does scholastic aptitude. In a sample of 50 colleges, the average correlation coefficient with first semester grades and the PVI was .40, which was the same as the correlation between the same grades and scores on the College Entrance Examination Board's Scholastic Aptitude Test. The average correlation between the aptitude test and the PVI was .10.

Iglinsky and Wiant (1971) attempted to explain the relationship between self-concept and GPA, but found no significant relationship. In a review of the literature on non-intellectual factors related to academic success, factors such as self-discipline, interpersonal relationships, self-concept, motivation, and aspirations were conceived to be related to GPA (Iglinsky and Wiant, 1971). Iglinsky and Wiant (1971) used 150 students and measured their self-concept with the Tennessee Self-Concept Scale.

There is evidence that attitudes toward study habits along with ability measures are better predictors of grades than either of the two measures applied separately (Carter, 1950; Brown and Dubois, 1964; Brown and Holtzman, 1967; and Thompson, 1975). Brown (1972) stated that studies aimed at uncovering the study skills and academic attitudes that differentiate high scholarship from low scholarship have mostly found significant differences in motivational orientations rather than significant variation in study mechanics. Brown and Holtzman (1955) made an intensive survey of the how-to-study literature, and concluded that attitude and motivational characteristics were of greater importance than purely mechanical procedures of studying. An important consideration is the motivation to use effective study skills (Lavin, 1965).

Cronbach (1949) indicated that interest and attitude measures may be tapping a motivational factor. There have been numerous studies demonstrating a relationship between study habit attitudes and GPA (Michael and Reeder, 1952; Lavin, 1965; Yonge, 1965; Desiderato and Koskinen, 1969; Clarke and Ammons, 1970; Dispenzieri et al., 1971; Michael, 1971; Brown, 1972; and Miller et al., 1972). These studies may be identifying a motivational factor within a stated attitude or interest to study.

The concept of motivation is difficult to identify, yet is often used to explain academic achievement. Bannatyne (1971) stated that, as a subject, motivation comprises one of the most controversial sections of psychology. Jones et al. (1973) referred to motivation as a "conceptual charlady" widely used to sweep up variance in academic attainment unaccounted for by traditional variables.

Michael and Reeder (1952) stated that the major purpose of a study habits inventory is to measure scholastic success, but at the same time correlated as near to zero as possible with a measure of scholastic aptitude. "The fulfillment of such an objective would tend to maximize the extent to which such an inventory would make a unique contribution to the prediction of scholastic achievement--that is, a contribution over and above that rendered by one or more standard aptitude measures" (Michael and Reeder, 1952, p. 237).

Lavin's (1965) massive review of prediction of academic performance studies indicated there have not been adequate controls for sex. Most studies are not concerned with the problem of sex differences. Seashore's (1962) review of the literature found that women's grades tend to be better predicted from aptitude scores than men, particularly in the social studies area. This is a trend that is more pronounced at the college level than at the secondary educational level (Seashore, 1962). Likewise, Albelson (1952), Endler and Steinberg (1963), Lavin (1965), Sampel and Seymour (1971), and Thompson (1975) found that women are more predictable than men, when using correlations between intellective factors and GPA.

Prediction of college grades has been a popular topic in the past and holds considerable interest for educators. There is a trend toward the use of non-intellectual factors when predicting achievement in college. One important non-intellectual factor is study skills. Considerable research has been conducted with study habits inventories with the intent of developing an instrument that will help predict grades.

In 1933, Wrenn published one of the first study habits inventories in the United States (Brown and Holtzman, 1955). Wrenn's inventory was originally designed for men but was modified later for women (Wrenn and Humber, 1941). An attempt was made to determine the extent to which study habit items could be used to predict academically successful or unsuccessful students. Wrenn believed study habits might correspond to academic success if ability was controlled. The work done by Wrenn in the 1930 and 40s was expanded by other researchers interested in study methods.

In 1941, Brown reported on the study habits of failing and successful students at the University of California, in Berkeley, using 331 students. A questionnaire was constructed by Brown (1941) with items covering such topics as: 1) reading, 2) reviewing, 3) concentration, 4) critical thinking, 5) note taking, 6) preparing for examinations, and 7) promptness in completing assignments. After two revisions the questionnaire contained 64 items. Brown (1941) concluded that large percentages of both failing and successful students do not make use of many efficient study techniques. Brown (1941) concluded that improvement in study method would be reflected in better grades. Later studies utilizing a more sophisticated methodology attempted to prove this point scientifically. The primary concern was to improve grade point averages by increasing study efficiency (reading, reviewing, note-taking, and concentration). Study habits inventories typically measure: morale or self-confidence, scholarly drive and values, study mechanics, and the tendency to plan for getting work done (Berg and Renten, 1966).

In another study also conducted in the early 1940s, Brown and Lofgren (1941) reported that of three variables (high school achievement, reading ability, and scholastic aptitude), the performance of failing students is strongly related to high school achievement. After World War II there was considerable research conducted on the subject of college performance, and an emphasis was placed on study technique.

Two researchers, Brown and Holtzman, have concentrated on study methods inventories and found that attitudes toward the academic environment are significantly related to achievement (Brown, 1972). Brown and Holtzman constructed a study habits inventory, the Survey of Study Habits Attitudes (SSHA), that is generally acknowledged as one of the best study habit inventories in the United States.

Brown and Holtzman introduced a questionnaire concerning study habits and attitudes in 1953; the original inventory had 75 items. There have been several revisions (the most recent in 1967), and the length of the inventory is now 100 items. This inventory, which is widely used as a research tool, has four scales:

1) Work methods--use of effective study procedures, skill and efficiency in doing academic assigments;
2) Delay avoidance--promptness in completing assignments and ability to resist distractions;
3) Teacher approval--feelings and opinions about teachers; their classroom behavior, and their methods; and
4) Educational acceptance--approval of educational objectives, practices and requirements.

The scales of work methods and delay avoidance are classified as study habits. Teacher approval and educational acceptance scales are classified as study attitudes.

There have been numerous research studies that link scores on the Brown-Holtzman SSHA with academic success (Holtzman et al., 1954; Brown and Holtzman, 1956; DeSena, 1964; Ikenberry et al., 1966; Pepper, 1970; Phillips, 1970; Brown, 1972; Goldfried and D'Zurilla, 1973; and Shaffer, 1973). One of the purposes of the SSHA is to identify students whose study habits and attitudes are different from those of students who earn high grades. The SSHA has been found to have a low correlation with typical measures of scholastic ability (.07 to .17) and moderate correlation with grades (.36) (Higgins, 1967). A major weakness of the SSHA is that responses can be manipulated by the student at will. Accurate responses on certain items may require insight beyond the student's capability (Roak and Harrington, 1969).

In 1974, Entwistle et al. presented a review of literature (mainly British) on the relationships between academic performance in higher education and motivation and study habits. This article dealt with the problem of identifying behavior associated with motivational factors. A simplified equation was presented:

$$\text{Performance} = \text{Drive} \times \text{Habit}$$

This symbolic equation was used to demonstrate what appears to be implicit in much of the current research (Entwistle et al., 1974).

Numerous British studies have concentrated on personality classifications developed by Eysenck (1965) to explain high or low achievement (Entwistle et al., 1974). Within this literature, it is generally understood that below average students are more neurotic and extroverted (Lynn and Godeon, 1961; Kelvin et al., 1968; and Entwistle and Entwistle, 1970). Entwistle and Cunningham (1968) stated that the relationship between neuroticism and attainment is linear. Students attaining good grades are less neurotic than those attaining poor grades. Savage (1962) stated that introversion is positively related to academic performance at the college and university level.

Entwistle has done considerable research in England on the topic of achievement in higher education and he has developed a study skills inventory. Self-report inventories designed to tap the more specific dimensions of academic motivation have been a particular interest of his. The dimension of academic motivation appears to have been conceptualized in terms of a type of intrinsic motivation which links competitive academic attainment with self-esteem (Entwistle et al., 1974).

One of Entwistle's first studies aimed at identifying factors of academic motivation was reported in 1968. This study was conducted at Aberdeen, Scotland, with 2,707, 13 year-old students using a self-rating inventory. The inventory was constructed to assess academic motivation and contained 24 true/false items. Entwistle (1968) reported that he was influenced by research in the United States that attempted to relate academic motivation to the more general trait of achievment motivation. He was particularly impressed with the research of Finger and Schlesser (1965) on academic motivation.

In 1966, Nisbet and Welsh had reported on an attempt to identify students at Aberdeen whose study methods were ineffective. Entwistle's 1968 report was an attempt to improve upon the research of Nisbet and Welsh (1966). A follow-up study of 2,707 students at Aberdeen was conducted using the Eysenck Personality Inventory (Entwistle and Cunningham, 1968). The relations between attainment and the personality dimensions of neuroticism and extroversion were examined. Girls who were classified as stable extroverts and boys were classified as stable introverts formed superior groups.

In 1969, Entwistle and Welsh reported that academic attainment is more difficult to predict in the high ability group than in the low ability group for secondary students, but academic motivation is more closely related to achievement for the high ability group. The ability groups were formed from 2,538 Aberdeen children who had been given tests yearly between the ages of 11 and 14.

Wilson (1968) investigated the personality and study methods of Arts and Science students at Aberdeen using individual interviews. Wilson demonstrated that the students who failed at the end of the first year tended to be unstable extroverts who admitted to poor note taking during lectures (Wilson, 1968).

In 1970, Entwistle and Wilson reported on a research project that attempted to measure motivation and study methods, using 72 graduates from Aberdeen University majoring in education. Entwistle and Wilson posed the question: "Could 'motivation' and 'study methods' be measured in a British university setting by a simple questionnaire approach?" (Entwistle and Wilson, 1970, p. 149). They were influenced by studies in the United States using the questionnaire approach, and incorporated certain ideas from American inventories. Items with appropriate face validity were drawn from theoretical descriptions of the achievement motivation construct. Good study methods and items indicating high motivation were selected by the staff and graduate students. Results indicated that the most successful students reported better study methods and higher motivation than weaker students. There was no information given about the number or kinds of items in the inventory. Items on motivation were related to the importance of academic success for the student; those on study methods related to organization and planning of work. This questionnaire together with the Eysenck Personality Inventory (Form A) was administered. Entwistle and Wilson (1970) concluded there is a recognizable interaction between study methods, motivation, and personality type in relation to academic achievement. Introverts appeared to be better students, but it was assumed that extroverts might improve their performance by systematic instruction in study strategy.

Entwistle and Entwistle (1970) reported on a study similar to the Entwistle and Wilson (1970) research. Entwistle and Entwistle used 139 university students and 118 college of education students to examine the relationship between personality, study methods, and performance. They used the same questionnaire as Entwistle and Wilson (1970) to measure motivation and study methods. A reference to studies in America attempting to measure academic achievement motivation was made (Finger and Schlesser, 1965). It was found that motivation and study methods are related to academic performance. The successful students plan their work carefully, think ahead, are conscientious, independent, self-confident, and recognize the importance of finding suitable conditions for effective study (Entwistle and Entwistle, 1970).

In 1971, Entwistle had two articles in the *British Journal of Educational Psychology* that reported on research with his study habits inventory (Entwistle et al., 1971 and Entwistle and Brennan, 1971). Cowell and Entwistle (1971) reported on the relationship between academic performance and the Brown-Holtzman SSHA for British students in higher education. They found significant correlations, implying that it is possible to define study methods which will be effective for a majority of students in England.

Entwistle et al. (1971) provided a detailed report on their new study habits inventory developed for British students in higher education. This inventory is called a Student Attitudes Inventory (SAI) and has 47 true/false items with four scales:

1) Motivation - 14 questions.
2) Study methods - 14 questions.
3) Examination technique - 9 questions.
4) Lack of distractions - 10 questions.

The items were initially allocated to two scales (motivation and study methods) (Entwistle and Wilson, 1970, and Entwistle and Entwistle, 1970). The items in the examination technique scale had been previously allocated to the study methods scale. The questions composing the lack of distractions scale were taken from the motivation scale. Validity was inferred from correlations with the Brown-Holtzman scale (.77), independent measures of hard work (hours studied), and the criterion measure of academic performance. In 1970 Cowell used the SAI and the Brown-Holtzman scales with 124 students from two technical colleges to provide evidence on reliability and validity.

Entwistle et al. (1971) used 893 university students, 562 college of education students, and 190 students in polytechnics and colleges of technology for his research sample. The motivation and study methods scales showed the most consistent relationships with the criteria of academic performance. The lack of distractions scale produced the lowest correlations with the criteria of academic performance.

Entwistle has been interested in personality types and how they relate to study behavior and performance. In a later article, Entwistle examined the relationship between personality and academic attainment; he found that the style of teaching may affect the relationships between personality and attainment (Entwistle, 1972).

A research study with the Entwistle SAI has been conducted in the United States, and it was found that a selected number of the 47 true/false items were most significant in identifying poor study skills (Thompson, 1975).

Motivation

1. It is most unusual for me to be late handing in work.
2. I enjoy the challenge of a difficult new topic in lectures.
3. I usually tackle the easy things first and leave the more difficult ones until the end.
4. I sometimes wish I had gone straight into work after school.
5. It's important for me to do really well in the courses here.

Study Methods

1. It's rather difficult for me to organize my study time; at school this was done for me.
2. I don't find much time to study during the holidays.
3. My lecture notes are often difficult to decipher afterwards.
4. I usually plan my week's work in advance, either on paper or in my head.

5. I find it difficult to keep awake during some lectures.
6. There seems to be little point in following up the references we are given in lectures.
7. There are very few of the recommended textbooks which are really worth buying.
8. I don't often join in tutorial discussions; I prefer to listen.

Exam Technique

1. I certainly want to pass the next set of exams, but it doesn't matter much if I only just scrape through.
2. I rarely seem to do myself justice in exams.
3. I often find that my mind goes blank when I'm faced with a particularly difficult question.
4. In exams I often have little or no time left to answer the last question.
5. A poor first answer in an exam tends to make me panic.

Lack of Distractions

1. Sport or social activities take up a lot of my time.
2. I get depressed easily--too easily.
3. Money worries have distracted me from my work.
4. To work effectively, I need plenty of time for relaxation.

If you are interested in your attitudes regarding study habits, you should complete a study habits inventory and seek the advice of a professional study skills counselor. You must attempt to complete the study skills inventory honestly. This may not be so easy, because individuals frequently are not aware of their subconscious feelings or attitudes.

Professional advice can help you to plan objectives and goals in higher education and provide insight on how best to achieve these goals. High school, college, or university counselors should be employed to help you plan for the future. These counselors should be able to understand your ability in terms of potential for college work. If you have a reasonable estimate of your ability, it should not be difficult to plan for your future education. Blanton and Peck (1964) have concluded that knowledge of students' aptitudes, attitudes, and activity patterns would make it possible to place and counsel students more effectively.

CHAPTER IV

Ways to Overcome Poor Study Habits

The most frequent complaint made by college students when the come to a psychiatrist or counselor is that of difficulty when studying. Counselors have found that over 50% of the students who come to them fall within the category of study problems of one kind or another. Students often complain of tension, anxiety, and depression, which are directly related to obtaining poor grades or fear of doing badly in course work (Blaine and McArthur, 1961).

The fear of failure is a real source of anxiety and tension for students in higher education. Students are under considerable pressure to do well in college, because they have learned that society does not reward failure. Indeed, our society does not tolerate failure. Most students have been taught to compete for grades, therefore it is traumatic when acceptable grades are not forthcoming. It is most unfortunate that we tend to brand students as failing or passing based on the grades they earn. Too often students are labeled as failing, and this stigma limits their chances of future growth and development.

To prevent failure, students must have a realistic image of their capabilities. This realistic appraisal may be accomplished by a professional counselor using some diagnostic instruments such as aptitude tests or study habits inventories. Another factor that can help is persistence or motivation to achieve. Students with low aptitude scores can overcome academic obstacles with the determination required to achieve respectable grades. This determination comes from a commitment by the student. A strong commitment to succeed is a basic requirement when starting any task. Students must come to know that they can learn and function in higher education, although for some the process may be slow and relatively painful. Undertaking any task that is not familiar to you often requires time to master. You may need patience, determination, and professional help to see you through. If you do need help, seek it. Do not feel ashamed to admit that you need help. Universities and colleges employ professional counselors to provide help to students; take advantage of the available resources.

Many students entering college have not learned to manage their time and do not know how to study. In college, passing grades are awarded for demonstrated knowledge about a particular academic subject. There are numerous ways to study, and there are some techniques to speed up the learning process. You can learn how to learn.

Managing time by setting aside certain hours in the day for study is the first requirement toward establishing adequate study habits. Students have to discipline themselves to use their time wisely. Pond (1964) found that low achieving students did not consider organized study to be important. High achieving students have reported that they organized their studying and time allocations, worked during free periods, decided on priorities, and tried to improve their study techniques (Pond, 1964). Furthermore, Pond (1964) found evidence that better organized students were able to adapt their study approach to overcome distractions in the academic environment and were able to maintain a more positive attitude regarding their studies. If there is a free hour between classes, this can be used to read the text or review notes from a previous lecture. Students must keep up with daily assignments in order to have time to organize for tests and other special requirements in their courses. This requires constantly reviewing the assignments and planning for completion. By keeping up with assignments you can reduce last minute panics and hurried work. Always allow plenty of time to accomplish assignments, so that errors due to haste can be reduced.

It is a good idea to make your plans early in the semester. Be sure that you understand all the requirements in the course, then make a plan to complete all assignments on time. Do not delay until the last minute when a research paper or some other special assignment has been assigned. If you have the option to select your own topic on a term paper, do not delay. Select a topic that interests you and plan to go to work immediately. Putting off required work backs up your schedule and increases the pressure on you. Often students will get behind in their work and find it is impossible to catch up. Plan your entire semester as soon as you have met each class and understand the requirements. If you know that several professors plan examinations during one week, then prepare for the exams in advance and be ready. The advantage of planning ahead is that the pressure of last minute panics can be reduced. There is no use in putting yourself under additional pressure due to poor planning. It is a fact that superior students plan ahead.

Planning your work is part of being in control of the situation. By planning ahead you give yourself time for extracurricular activities. It is healthy to plan for recreational activities that take your mind off course work. A healthy student will have other activities and interests outside of academics. It has been found that honors students have a most active social life (University of Wisconsin, 1974). There are numerous activities going on during the course of the semester, and you should plan to engage in social events. Only you will know what is appropriate in terms of available time for extracurricular activities. You should plan to enter into some social activities, but do not overdo it. Remember that your grades are most important if you plan to stay in college.

As a part of planning your activities, it is good to identify a place to study. The library is a good place to study, because it is quiet and reference books are available. Establish a routine for doing a certain amount of studying each night during the school week. You should plan to review your notes each day, even if it is just a quick review. On weekends, it is wise to set aside certain hours for studying and keep on schedule. Do not attempt to study with numerous distractions. Studying with the television or radio on is not a good practice.

It is also difficult to study with groups of people. Usually groups have a problem staying on the study topic. It is easy to get side tracked to other interesting topics not associated with academics. If you do make the decision to study with a friend or group of friends, you should not plan to spend much time in this group activity. The group process may be useful for identifying the important areas for future individual study, but it should not be a substitute for individual study. After you have done some individual study you may want to get together with your friends to talk over important topics. In this way you can find out from your friends if they have some of the same questions or concerns that you have.

The research evidence indicates that good students are quite independent and do not rely on others to do their work for them. While studying personality factors, Grace (1957) concluded that independent-responsible students were more likely to remain in college than dependent-irresponsible students. Mature, stable students appear to persist in college longer than immature, unstable students. Stable, mature, flexible, introverted, independent, organized, and autonomous are terms that have been associated with superior students. You may wish to take stock of your activities and determine if you could apply these terms to yourself. Do not be alarmed if you find that these terms do not apply to you. Be yourself, and do the best you can with the time you have to study. You can fit into the scholarly role by simply doing those things that are expected of scholars. Your behavior is a reflection of your personality and values. R. D. Laing (1967), a psychiatrist, said our behavior is a function of our experience, and we act according to the way we see things. "...behavior is a function of experience; and both experience and behavior are always in relation to someone or something other than self" (Laing, 1967, p. 25).

Planning to accomplish your assignments on time will help to keep you organized. Organization implies that you are coordinated and have control of the elements around you. You can organize activities such as study time, place of study, and recreational activities so that you are in control of the environment. Your time is most important, and it should not be wasted while you are a student. As you grow older, time usually becomes more significant. You should also plan to get adequate rest and proper nutrition during your student days. It is a good idea to plan on a proper diet and sufficient sleep each 24-hour period. Your daily routine will be demanding in terms of concentration required, so you should plan to be alert, particularly in class. Instructors appreciate students who seem to be attentive and interested. Academic demands require hard work in terms of concentration and thinking. If you have not been accustomed to long periods of study, then you must train your mind and body just as an athlete trains by daily drill. Any new requirement seems difficult until you master the skills needed to do the job.

It may be useful to make a long range plan, then make a weekly plan every seven days. You should set goals each week and attempt to meet those goals as best you can. This can be done in your head or by writing out your plans on paper. One usually has to revise her or his plans frequently in order to get along from day to day. You should not be so rigid or inflexible that you cannot tolerate change. Superior students are quite flexible, and they accommodate themselves to various situations and activities with very little strain. Being able to adjust to different situations and environments is a characteristic of individuals with good mental health. You should not let the little things in life be a bother to you. Walter Pauk (1962), a prominent reading specialist and study skills counselor, has excellent advice for students with mental health problems.

> Take one thing at a time--for people under tension, an ordinary work load can seem unbearable. The load looks so great that it becomes painful to tackle any part of it. Remember that this is a temporary condition. You can work your way out of it by tackling a few of the most urgent tasks one at a time, setting aside all the rest for the time being. Once you dispose of these obstacles, you'll see that the rest are not insurmountable either. You'll be in a mood to accomplish more, and the rest of the tasks will go more easily (p. 126).

It is healthy to overlook small annoyances and concentrate on the big problems. Psychologists generally agree that healthy, well-adjusted individuals are able to enjoy themselves in spite of petty annoyances. It is not good to become too absorbed with minor problems that we all experience from time to time. Having a good sense of humor will help.

Blaine and McArthur (1961) have reported that students often complain of uncontrollable tension and restlessness coming upon them as soon as they try to study. It has been found that in less structured activity around the college or university students feel relaxed and are able to behave in a productive manner, but as soon as they sit down to write a paper or do a reading assignment, they are filled with anxiety. "This severe restlessness is often the result of some anxiety about a pressing problem which is not directly related to the student's academic life. Such things as financial stress, a frustrating or disappointing love affair, or the illness of some close member of the family may be the source of considerable concern to the student, and this concern may be diverting his energy and handicapping his powers of concentration to such an extent that he is unable to do any consistent studying" (Blaine and McArthur, 1961, p. 79).

Frequently, students will say they recognize the presence of another problem, and they feel sure that the difficulty in concentration is directly related to the material to be studied. A therapist may be able to help you to identify underlying feelings, with the result that anxiety is decreased to a point where study can be continued. Professional help may be required to identify your problem and provide solutions. There is no stigma attached to seeking professional help. In fact, it is an indication that you recognize you have a problem and are attempting to deal with it. This is an indication you are healthy and normal. Most people have problems that require professional help from time to time. Try not to dwell on your problems, but do not ignore them. Do the best you can--sometimes your feelings send you messages telling you what to do.

The first step toward solving any problem is recognizing it and seeking help. This is especially true in regard to study habits. If you examine your activities and find that more efficient use of time might improve your academic standing, then try a new approach. What have you got to lose?

Being well organized and planning ahead can become part of your daily routine without too much trouble. It is important for students to set priorities in their life. If pressing course work and getting a college education are not top priorities for you, then you should consider doing something else. Weitz (1955) and Shuman (1956) found that students with definite career plans who have identifiable educational goals appear to be better prepared for college than those who do not. Students are wasting their time, the instructor's time, and their parents' money, if they do not take advantage of the opportunity to get an education. If a college education is important, then students should do those things that will help them to attain that goal. Study behavior will have to be a top priority, if you expect to graduate from college. Faw and Waller (1976) cited empirical evidence from traditional learning research suggesting that the single most important determinant of how much is learned is probably total study time. This should tell you something--if you want to learn, you need to study.

If you have decided that a college education is a worthy goal, then you should devote considerable attention to those aspects of collegiate life that will help you attain that goal. It may be difficult to know what you want from your life regarding vocational choices; however, you should attempt to get some general idea as soon as you can. A good professional counselor should be able to help you. You have to be comfortable with yourself when working within your speciality. If you feel good about your work and enjoy doing it, you are on the way to being successful.

Once you have made a commitment to academic work, it will be easier to conform to the requirements. College students will quickly find that considerable conformity is required to get an education. A failure to learn will cause a student to be dismissed from college, but learning alone will not keep one in if you do not fit into the college structure and meet its demands (Pitcher and Blaushild, 1970). You will have to stand in line to register for classes, endure long lectures, attend classes that do not interest you, and study materials that seem to be of no value in your educational development. These requirements are part of the process of getting an education. It may seem to be boring at times, so considerable control will be required to meet the mundane requirements that all college students must endure. This form of academic hazing is a part of the initiation rites that are administered to *all* students.

You will encounter more of this so-called academic hazing the further you go in higher education. Graduate students are frequently required to probe obscure topics in depth and are called upon to make some sense from the most technical and complicated academic matters. Students must be able to ignore petty displeasures and concentrate on the long-range goal. Being able to overlook minor vexations requires stability, maturity, flexibility, and a feeling of self-confidence. If you have these traits, consider yourself fortunate; however, do not despair, if you feel inadequate in the student role. You can learn to become a good student.

Bloom (1968) has concluded that every student can learn difficult academic skills and master their course work. Some students will require more study time than others, but the persistent student can become proficient at an academic task. You may need to budget your time to allow long periods of study for difficult courses. This is part of planning and organizing that can help you prepare for the demands that you will encounter.

Being able to concentrate on your assignments is not often easy to do. After you have allowed for time to study and a place to study, you may find that it is difficult to concentrate on the task at hand. There is no simple solution to the problem of concentration required to study. It might be best to plunge right in and do the best you can, regardless of how unmotivated you feel. Superior students often study when they do not feel like working on an assignment; however, you should plan to take breaks from long periods of reading or studying in order to rest yourself and obtain a certain perspective. Many professional educators suggest a ten minute break after approximately 60 minutes of study. This gives you time to reflect on your efforts and make adjustments, if you do not think you are progressing.

Long periods of study without a break may *not* be healthy. Compulsive study is an indication of poor mental health. Attempt to get away from your work occasionally in order to refresh yourself. Long hours of obsessive, but ineffective work will rarely lead to academic success. Obsessiveness is one of the symptoms of study difficulties associated with psychiatric disturbances which has been described in clinical investigations (Entwistle et al., 1974).

Crown et al. (1973) developed a questionnaire that produced three factors of study difficulty--anxiety and depression, obsessiveness in seeking work satisfaction, and a combination of low motivation and disorganization. It is clear that quality, as well as quantity, of studying are important (Entwistle et al., 1974). You have to maintain the proper balance, and only you can determine that. Too much concentration or work can be debilitating and might cause you to miss an interesting aspect of your college life--the social activities.

Social activities such as dating, bull sessions, athletic events, movies, concerts, and campus politics are healthy if done in moderation. Social outlets with peer groups can be stimulating and fun. A part of your education includes learning to get along with groups of people, different from your own background. Large universities contain a heterogeneous mixture of students from different parts of the United States with various socioeconomic backgrounds. You should be willing to make new friends and learn from them. Numerous studies have shown that students learn from peer relations that constitutes student society. Having friends and being able to enjoy yourself is one indication that you are well adjusted and in a healthy frame of mind.

The problem that many students have to overcome when in college and on their own for the first time is to discipline their activities. The collegiate environment offers numerous tempting activities for relief from the pressures of academic work. You must understand that your time is limited. You cannot possibly engage in all the activities that look appealing. Limit your social activity to occasional periods of frivolity. It will be difficult to say, "No, I must study." Attempt to maintain a balanced schedule of activities between study and play. Too much of one or the other can be detrimental to your academic goals. You should develop an instinct about knowing when to study and how much time is required for each course. This study instinct will take time to develop. Well-trained athletes know certain moves and behaviors instinctively, due to long periods of training and competition. It may be possible to discover cues to let you know when to study; this will take time. Superior students place a high priority on study activity; they are well prepared for their assignments and examinations.

Human behavior often follows certain patterns, and social scientists look for these patterns in order to make predictions and have knowledge of the world. It is most difficult to make predictions about individuals without knowing how they act in certain situations. Recognizing behavior patterns of students can indicate if they will be successful in their academic work. Students that do not organize their activities tend to drift aimlessly without purpose. This pattern indicates the student does not have certain priorities and will probably not be successful until he or she finds an interest in life. Academically successful students consider their course work to be important, and they make every effort to secure good grades. If secure, healthy students do the best they can, good grades usually follow.

Students who have difficulty concentrating when attempting to study may have emotional problems that can be treated by professional counselors. Recognize your problems and get help. Not being able to concentrate is an unhealthy pattern if it is prolonged, and it should be treated if you intend to be successful in college. A professional counselor can provide you with some helpful suggestions regarding concentration and study skills, but you will have to be receptive to these suggestions and be willing to try them. Try to have an open mind to ideas for improvement.

You have been accustomed to controlling your behavior in some ways since childhood, so it should not be too much trouble to modify your behavior to conform to college requirements. Considerable emphasis is placed on controlled behavior patterns in academic life. Students and professors alike discipline themselves to observe, communicate and concentrate. These skills are most important, because they lead to knowledge of the world. Universities are committed to increasing the available knowledge in the world. Students must be committed to increasing their own knowledge with a reasonable approach.

Students must train their minds just as athletes train their bodies. This process takes time and requires a certain devotion or dedication to a particular life style. Educated people have been able to train themselves to read, write, and think without too much strain. Students learn to develop these skills in college so that they might make a living and enjoy themselves in later life. There are no easy ways to master study skills, other than practice with a good teacher. There are, however, some useful tips concerning study skills and the prescribed behavior while in college.

CHAPTER V

Implications

It should be quite clear from the research evidence that successful students tend to plan their work carefully, think ahead, are conscientious, independent, self-confident, and recognize the importance of finding suitable conditions for effective study. Being able to organize, having a good self-image, and being flexible are most important traits for students to have. For students that are handicapped in various ways, there is hope. Students can learn academic skills, if they have a good teacher and work to help themselves.

Self-image is a most important characteristic, and superior students have a good feeling about themselves and their work. The concept of self-image is also an important aspect of one's mental health. Healthy people like themselves and find it easy to like others. Underdeveloped students will have traits relating to poor mental health, but these traits can be reversed with the help of a good instructor and some rewarding educational experiences. This will take time. There are no simple solutions.

The implications of this research for students, parents, and teachers should be clear. You need to have a realistic understanding of student abilities and plan an effective remedial program if help is required. Students must take stock of their academic position and develop their skills, if graduating from college is a priority. Parents and teachers should be aware of the research literature that indicates teaching remedial study skills can improve grades. You must understand that only professional study skills people with well-developed programs can help. There are many non-effective programs operating in higher education, particularly in the two-year institutions of higher learning.

Individuals involved with study skills courses should know the characteristics of underachieving students and what the research literature says about helping these unique students. It is a fact that many persons charged with the responsibility to administer programs for the underdeveloped are not familiar with the research literature. They do not know what works and what does not work for underdeveloped, high-risk students. The facts is, many people engaged with study skills and remedial courses have not read any research literature.

Many administrators do not understand that responsible professionals are required to staff study skills courses. There should be a strong remedial program in every institution of higher education that has an open door admissions policy. A review of the research indicated that study skills training should be taught in conjunction with remedial courses such as reading, if academic performance is to be improved. Administrators should seek the most qualified personnel available to conduct remedial/study skills courses, if they expect to demonstrate the effectiveness of such programs. Unqualified staff members and student tutors cannot significantly help high-risk students achieve academic success. A concentrated remedial program staffed with professional personnel knowledgeable of diagnostic instruments and evaluation procedures are required; remedial programs that do not have qualified professionals are useless, according to previous research.

Administrators with incompetent personnel should not attempt to deal with high-risk students, nor should they make claims of having study laboratories or remedial programs. Academic deceit by administrative charlatans does not help students to graduate; moreover, this behavior by administrators attempts to present shallow, non-effective programs as worthy for student consumption. Such misrepresentation is a waste of money, and violates principles of sound scholarship. Administrators operating remedial programs with no substantive evidence of study progress are derelict in accomplishing institutional goals. Parents should be on guard to the non-effective study skills programs that are being conducted, and they should understand the characteristics of students with problems. Parents need to be supportive and patient with the aspiring student if a study skills problem becomes a handicap.

It is recommended that personnel working in study skills laboratories read the literature describing the characteristics of high-risk students. Teachers and administrators may not understand that they may be dealing with students that are handicapped in many ways. The high-risk student will probably lack self-confidence to do academic work, have low self-esteem, and demonstrate frustration while attempting to accomplish tasks too difficult to master. Research with high-risk students has demonstrated that improvement may enable the student to graduate, but those that start with relatively higher ability measures are most likely to show the greatest improvement.

Based on the research, colleges and universities should screen their students and conduct a diagnostic profile for each high-risk student entering. Specific remedial treatments should be attempted. Research indicated that high-risk students can be helped to obtain better grades than what has been predicted for them. This approach would help the high-risk student attempting to earn a degree, and it would lower the attrition rate for colleges and universities. Institutions of higher education in the United States need students to function. Making a concerted effort to retain those freshmen that enter higher education will be reflected in larger enrollments. This benefit should be of particular interest to administrators within higher education, because there will be increased competition for students in the future. Those institutions that open their doors to all students and can demonstrate ways to retain their freshment until graduation will be considered the most successful. Under the influence of an egalitarian philosophy, numerous institutions of higher education in the United States welcome all types of students. Those institutions that do not employ professionals to make a proper attempt at upgrading academic skills are being dishonest.

Smith et al. (1975) did a comprehensive survey of learning centers (reading and study skills programs) in the United States during the fall of 1974. According to Smith et al. (1975) a comprehensive survey of learning centers had never been accomplished before. The initial survey instrument consisted of 70 questions on administration, budget, staffing, services, facilities and materials. On October 1, 1974, the survey questionnaire was mailed to the 3,389 campuses of all 2,783 accredited colleges and universities listed in the 1972-73 and 1973-74 Educational Directory. Of the surveys mailed, 1,258 (38%) were completed and returned. Of all colleges responding to the survey, 61% indicated plans to develop a learning center within the next two years. Seventy-eight percent of all two-year colleges reported having centers, compared with 57% of post-graduate institutions, and 43% of all centers became operational after 1970, and a mere 10% existed before 1960; 61% of all centers before that date were in post-graduate institutions.

The administration of learning centers is a subject of concern. No clearly established pattern of administrative responsibility emerged from the Smith et al. (1975) report. Learning centers in two-year colleges tend to be administered more frequently by English departments. Centers in four-year colleges and universities tend to be administered by Departments of Education or Counseling. English departments administer the highest percentage (23%) of the study skills centers. Two-year colleges tend to have staff with English degrees in their learning centers, while four-year and post-graduate institutions tend to have staff with degrees in educational psychology and counseling. The smaller the college the more likely its center would be administered by an English department and have staff with English degrees. The larger the institution the more likely it would have a center administered by education or counseling and have a staff with degrees in those areas (Smith et al., 1975).

The results of the Smith et al. (1975) report indicate there is a heterogeneous mixture of disciplines involved with learning skills programs (English, Education and Psychology). Through this mixture there are probably different approaches and methodologies being used to treat high-risk students. Those involved with study skills programs should be aware of the research literature, but unfortunately, there are many teachers that are unaware of the unique problems high-risk students have. Many of the people teaching study skills courses do not have formal training with study skills strategies. Many persons learn while on the job, through a trial and error method. This may be a good way to learn, but it is difficult for the students that may or may not be helped while someone is learning with them. High-risk students need professional attention not practice teachers.

Some methods of good study are discovered by mere chance, others, through experiments made by individuals in an effort at getting as much done as possible within the briefest span of time, and others are the result of thorough scientific research (Poulsen, 1969). The scientific method offers clues that can be used to improve our technique within certain bounds. Sten C. Poulsen (1969), a Danish study methods researcher, reviewed all the reports on study methods listed in Pscyhological Abstracts from 1927 to 1967 and concluded there were numerous weak research designs and poor studies. Poulsen (1969) said we need more research on study methods, and the research needs to investigate the amount of time students spend on different activities. Poulsen (1969) also noted that unless systematically exposed to external influence, students do not change their mode of working to any great extent.

Those involved with study skills courses would be doing a service to their cause if they could demonstrate that their efforts do make a difference in helping students. Too often a treatment is applied with no follow-up done to determine if the treatment helped. Knowing what strategies work with different types of students is useful to the professional. Study courses must be tailored to individual needs; diagnostic examinations are required to map an individualized plan for help. Gladstein (1963) claimed to find evidence that a model of good study behavior can be applied to each student on an individualized basis. One must consider personality differences, ability, and past achievements (Gladstein, 1963).

Knowing what has helped students can be used to project programs and plan for the future. Good study skills and remedial programs such as reading are expensive to maintain. Qualified professionals are in demand and staff personnel are required to sustain an an active learning center.

The best approach for individuals getting started in the area of study skills is to read and understand the research literature. Having a knowledge of the research literature is necessary for a basic understanding of the problems high-risk students have. High-risk or underdeveloped students are handicapped in many ways; students need to understand their problems; parents and teachers must also understand the problem and be able to offer help. You can learn to cope with the study skills problem if you know the nature of the problem and strategies for administering aid.

A reasonable evaluation of the problem and a commitment to improve are basic requirements for the student. Too often students hold a distorted view of college life; they are prone to overlook the academic requirements and often find it difficult to settle themselves down to serious scholarly work. This is a human characteristic, in that we frequently do not care or face the unpleasant realities of life. Students must adopt the student role and assume responsibility for their actions to academe. This is the first step in a life-long process of assuming responsibility for your actions and well-being. Considerable *courage* may be required. You must be able to say you did the best you could and then go on from there.

CHAPTER VI

Academic Classes and Classroom Protocol

Prior to signing up for classes, students are usually required to talk to an advisor. Academic advisors attempt to guide students into classes that fit their particular needs and aptitudes. These advisors are members of the faculty with the responsibility to give students advice concerning academic matters. Some advisors are very conscientious and will give students their utmost attention, others are busy with academic projects and don't put much effort into the business of giving advice. If you happen to be assigned to an advisor that you do not get along with, then ask for another advisor. Your upper class friends may have some suggestions. Frequently your fellow students can be the source of information concerning classes to avoid and advisors to avoid. It's a good practice to cultivate friends on all levels throughout the college or university.

Your advisor will look over your college aptitude scores (most colleges require that you take either the Scholastic Aptitude Test--SAT or the American College Test--ACT) and determine where your strengths and weaknesses are. If you have some doubts about your academic aptitude, you should take either the SAT or ACT examination in your junior year of high school so that you can get an indication of your abilities and make plans to work on any deficiencies. After looking over your aptitude scores the advisor will be able to tell you if you should consider remedial courses. If you have exceptionally low aptitude scores, you will need to face up to the fact that remedial work is required. That is why you should consider taking the ACT or SAT early in your high school years so that you can begin to correct any apparent problems quickly. Parents and high school counselors should be sensitive to academic problems and work to help potential college students before they arrive at a college or university. If serious problems are present, you might consider summer remedial classes while in high school or a summer study skills and reading course prior to entering college. Chapter II reviewed the research with underdeveloped students using a remedial/study skills approach and considerable help has been provided to the high-risk student through a pre-college study skills course. You should also consider taking a study skills course in your freshman year of college if you cannot take it in the summer prior to entering college.

After your advisor has had a chance to talk to you about your aptitude scores, he or she will discuss what classes are appropriate for you. There are certain required courses that all freshmen have to take. Usually two semesters of English composition are required along with one or two social studies classes and a beginning course or two in your major field. If you can, it might be a good idea to take one course, such as English composition, in the summer prior to entering college. This will give you a taste of college work without too much strain. Having completed a college course in the summer will give you a bit of a head start for the fall semester. You could reduce your academic load in the fall by one course if you want to. Concerned parents should think of summer school as a way to give students some idea of what college work is like. It's a good way to start the college adjustment process without taking a full academic load. Normally three courses are considered a load in an eight-week summer semester.

If you are attending a large university you should make plans to visit the campus with your parents in the summer prior to entering. This is also a good policy for those attending smaller institutions to include two-year colleges. You might be able to get some aptitude testing, advising, and other requirements completed prior to the start of the semester. It will be to your advantage to complete these requirements as soon as possible. When you arrive on campus there will be numerous activities such as: meetings, buying books, getting to know new friends, registering for classes, social activities, and advisement sessions that are required. If you have completed some of those demands in the summer, then your adjustment period will be more relaxed and perhaps more enjoyable. Most institutions of higher education have either a formal of informal summer program available for prospective students.

If you have made a decision about your classes, the next step is to get yourself prepared to do the best you can in your classes. You should know where to go to meet your classes. On large campuses you may have to walk a considerable distance. It might be good to take a walk around the campus several times prior to the start of classes. Large campuses can be confusing with many large buildings and thousands of students rushing to get to class every 50 minutes. You should know your environment. You need to obtain your books for your classes early along with all lab equipment necessary. Be sure to have a notebook for each class you attend. Your notes can be most important, if you review them often.

It is a good idea to try and get to class early and take a seat near the front. In large lecture classes this will help, because you can see and listen better. Professors in college will seldom place students in seats by alphabetical order. Sometimes the professor may ask that you keep the seat you started with in the first class for attendance purposes. You may have some rather large classes, up to 500 or more at large universities. Do not let this bother you. Usually the large class meets once or twice a week and the other meetings during the week are with graduate assistants in small groups. You should be alert while in class and be eager to ask questions when the right time comes. If you are not too sure of an assignment or some other aspect of the course, you should speak to the professor during or after class.

The first day of most classes is usually devoted to explaining the requirements. The professor may give you a course syllabus (the word syllabus is from the Greek and literally means outline). The course syllabus will explain the organization of the course and inform you of certain requirements such as examination dates and special assignments (book reports, special projects, papers, or other requirements). Be sure to hold on to your course syllabus. It is a good idea to copy examination dates and other requirements in your notebook.

College professors are busy people, and they do not have much time for students with excuses about why a paper was late or an examination was missed. Do not be late with assignments or miss an examination unless it is an absolute emergency. Heckhausen (1967) found that failure-motivated students turn their home work in later than their success-motivated fellow students. Also, they do not miss class or come in late frequently. If you do come into class after the lecture has begun, it is a good policy to tell the professor why you were late and ask to be excused. The professor will appreciate this courtesy and may come to understand that you are a serious student. You may be identified by the professor as one who takes academic work seriously. Professors appreciate serious, conscientious students. Most professors take their work seriously, and they expect their students to do the same. You will find that professors have very little patience with lazy students. The professor probably would just as soon not have you in class if you are not serious about the course. Most professors at large institutions are busy with their own research, and they frequently look upon classroom teaching, particularly to lower division students (freshman and sophomores), as a burden. They can be most unsympathetic to students that are not taking advantage of their educational opportunities.

Do not be afraid to talk to your professor after class or ask for an appointment to discuss something that bothers you. You may want to ask for an appointment to discuss a low test score or some aspect of the course that interests you. Professors are usually happy to talk to students, if they have time. If you are discussing a test, do not be too defensive or abrupt with the professor. Arguing with the professor or making excuses for a poor performance is not the way to help your cause. Attempt to be positive and let the professor give you advice. Have a mature attitude regarding your problems. If you did poorly, seek the advice of the professor and attempt to follow it. You should realize that college professors have taken a great number of classes themselves, and they have probably taught many thousands of students before you came along. It could be that they might have some valuable advice for you.

The first thing that professors usually do in class is to explain the course requirements. Do not become alarmed if the requirements sound rather demanding. Remember that professors were once students, and they usually will not require you to do something they have not done themselves. It takes several class meetings to get accustomed to your professor's likes and dislikes. Each class you attend is different, and each will be different according to the views of the professor. Professors have their little personality differences like anyone else, and you will find it is to your benefit not to cross the professor. Also, do not make a display of your knowledge to show off. If you have a genuine concern be sure to speak up, but do not talk just to pass the time of day or make a display of your knowledge. This is a form of wasting time, and a professor considers time to be valuable.

You should not become too discouraged if you find that several tests or other requirements come due during one particular week in the semester. Remember, the research evidence indicated good students plan for the future. They are usually not caught short, because they have made plans to be ready for their tests and other assignments. It is best to start planning for your requirements as soon as you learn that you have an academic obligation. Research by Rutkowski and Domino (1975) indicated that students who tend not to delay are apt to be of an active, participative temperament and are conscientious, responsible, show self-control and tolerance, are diligent, well-organized, resoucеful, cautious, and methodical. These characteristics are indications that you will be successful if you do not procrastinate. You should not panic when course requirements are given. Start immediately to accomplish your assignments, and do the best you can. As long as you are doing your best, you should not worry too much.

Students usually find that they have to be rather flexible in their studies. Some classes will require one thing and other classes will require another. Be flexible in your approach to each class you have. Do not assume that because you did well in one course you will automatically do well in another. You will have different requirements for each class you attend, and you must be prepared to meet the demands of these different classes. This means that you will have to be flexible in your approach. You will have to know how to take essay examinations as well as objective type of examinations (true-false and multiple choice), and you will have to learn to write papers to suit the professor. You will learn how to adjust yourself to each class as you get experience with the student role. Do not assume that your high school record or previous study habits will get you through college. College requirements are different in that more depth is presented, and more responsibility is placed upon you to get the job done. Your professors will not have the time to give each student a lot of individual attention. After the course requirements have been given, it will be up to you to complete the requirements.

Class attendance is important if you intend to make good grades. Anikeeff (1954) did a research study on attendance and grades with 34 college faculty members using 2,659 students. The research indicated that for all class levels the average number of absences was smallest for A grade students and it increased progressively through letter grades B, C, D and F. Anikeeff (1954) speculated that lack of motivation could explain the accumulation of a large number of class absences. You may recall from Chapter II that Lesnik (1972) said lack of motivation is usually expressed in some form of resistance to becoming involved in studies. Absence from scheduled classes is a good illustration of resistance to becoming involved in academic studies. Going to class is a basic requirement that all students must do in order to pass the course. You will find that many professors do not take attendance these days, but they recognize those students who are regular in attendance. This is particularly true of small classes (those with less than 20 students). If you are regular in class attendance your professor may take this into consideration when it comes time to evaluate your performance for the semester.

There are several benefits for you from regular classroom attendance:

1. You will know the course requirements and assignments.
2. You will come to understand the professor's expectations.
3. You will probably learn more.
4. The professor may notice that you are a conscientious student and may be impressed with your desire to learn.
5. You will be developing study habits and patterns that may help you in future academic courses.

You should realize that assigned textbooks and other readings are merely guides for learning. The professor is the facilitator and a key element in the teaching-learning process. In order to get the benefit of a professor's knowledge, you must attend classes and attempt to enter into classroom activities such as discussions and question and answer sessions. You can learn to be attentive and alert in the classroom environment. The first step is to go to class.

When you are in lecture courses it has been found that students will retain more of the material presented if they are active in some response activity such as underlining key ideas or taking notes (Faw and

Waller, 1976). Another way to keep your mind on the lecture subject is to relate the new material to what you already know. It is also suggested that you think of questions relating to the material presented. The idea is to keep yourself active in doing something or thinking of something related to the lecture topic. If you day dream or come to class preoccupied with other thoughts, then you may not understand what was presented and miss out on something interesting. Another more practical problem is that you may miss some information that will be on the test. Most professors cover topics in lectures that will be on the examinations. You should be alert in class to topics the professor gives emphasis to. Usually the professor will give emphasis to those topics that will be on the test.

There will be times when you must force yourself to attend lectures, but remember that it's in your own best interests to attend class. Students that miss classes regularly will not be in college for very long. Most instructors believe that class attendance is a requirement, and students should not miss regularly assigned classes. In many colleges your grade will be lowered if you miss more than three or four times without a legitimate reason. This requirement varies from school to school and from class to class. A professor is allowed to set the course requirements and class attendance may be part of your grade.

You will find that each professor sets up grading standards differently. Some professors will use letter grades and others will use numerical scores that can be converted to letter grades. Not only will the grading be different from class to class, but the requirements will also be different. Each instructor will have unique grading practices and course requirements. This situation should not be too different from what you experienced in high school. You will have to be flexible in order to adjust to each classroom situation you experience. Your English class will have different requirements and grading practices than your history class. HIstory will be different from sociology and psychology and so on. If you are doing your best in each class, good grades will usually follow you.

Do not become discouraged if you have some difficulty the first semester. The first semester is usually the most difficult. For many freshmen this is the first time they are really on their own. Parents and teachers should have some understanding that freshmen have several adjustments to deal with. A supportive attitude from parents and teachers can help. Parents and teachers should remember Rollo May's quote from Chapter I. "When I was in college I found the experience of having some adult believing in me crucially important; and at times thereafter in my life when I was faced with fateful decisions, I found myself casting about to fasten upon one of these persons" (May, 1972, p. 139). College freshmen will need support from time to time just as adults require this support during difficult times in their lives. Parents should be particularly sensitive to the needs of their children when first attending college and away from home for the first time.

If you have experienced academic problems in high school and are not too sure of your abilities, you may want to consider a small, residential, coeducational institution over a large university. Students that expect to have adjustment problems should consider a smaller college or university. It may be that small institutions can provide a more supportive environment for students than large universities. You may also want to check on the study skills and remedial courses offered prior to enrolling. Some institutions have very good learning centers, and others claim to have these facilities without getting qualified professionals on the staff. Parents should look into the study skills and remedial courses offered in colleges, if you have plans to use these facilities. You should inquire about the professional staff available to help and the evidence that indicates their particular approach works.

When you get into the swing of going to classes and adjusting to the social demands, you may have to budget your time. In a research study by Dole (1959), it was found the average academic week reported by students was approximately 40 hours, equally divided between preparation and class attendance. There were wide individual variations, but the average was 40 hours. A similar study was done at an English university, and the average working week for students ranged from about 30 hours to about 40 hours (Thoday, 1955). Yarington (1967) had freshman students at Ohio University report their daily study time for one full year. He found that reported study time averaged 14 hours per week (this varied from a low of 11 hours to a high of 21 hours).

Wark and Raygor (1970) claim that Yarington's study is the most adequate report of the subject that has ever been done, and it destroys a common myth--that students should spend two hours in homework for every hour in class. If you spend 30 to 40 hours per week in a combination of attending classes and preparing for classes, you will probably be in good shape. If you are not well prepared to take some subjects, you may need to spend more time studying. This will depend upon your academic ability and interest. Yarington (1967) found high ability students are more efficient with the time used to study. In some cases high ability students studied less than low ability students. Ability, background, emotional factors, motivation, and a knowledge of how to study will affect academic success (Yarington, 1967).

Most professors use the lecture method to transmit information to students. Bloom (1953) found that students can learn as much information by means of the lecture method as they can by use of the discussion method. Bloom (1953) said if the objective of education is the development of knowledge about a topic or field, the lecture is a far more efficient method of communicating such knowledge and of securing the attention of students to these ideas than is the discussion method. If the objective is development of abilities and skills which are problem-solving in nature, the discussion method is superior.

You should be prepared to listen to numerous lectures while in college. This is a traditional method of transmitting information in academe, and you should get used to it. In upper division courses (junior, senior, or graduate classes) the seminar or discussion method is perhaps more frequently used. You will find that every professor is not a stimulating, well-organized lecturer, and considerable concentration on your part will be required to get the main points from many classes. If you are having trouble understanding your professor, do not hesitate to ask questions. By asking a question you are indicating to the professor that you are interested in learning something from the course.

Many students do not take advantage of the help available to them when they are having trouble with their study problems. You should seek the advice of your advisor, a counselor, or your classroom professor if a particular subject is giving you problems. Do not hesitate to seek advice and help when you need it. Advisors, counselors, and classroom professors are available to help you, and most of them are quite willing to give advice. You may want to set up a regular weekly appointment with a counselor or an advisor. Take advantage of the help that is available to you on campus. Remember that institutions of higher learning need students to function, and without people like you, they could not stay in the education business. Most educators these days are quite aware of the fact that they need students to function. In fact, many institutions of higher learning frequently advertise for students in newspapers or periodicals. Many colleges and universities have budgets that are related to the number of full-time students attending classes. Administrators are very sensitive to enrollment figures, and they become alarmed when there are drops in student enrollment. You should take advantage of this situation if you need help, but don't forget that you will have to put forth some effort.

It has been pointed out in Chapter I that having a positive attitude about your abilities is good for you. You should take the position that you can do very well in all your classes if you try. Be realistic with yourself, and study when you need to. Do not put off required work until it's too late.

There are some useful ideas concerning taking notes, listening, reading, and taking examinations that are presented in Chapters VII through X. You should be familiar with these ideas and suggestions, because they might be of some value to you in the future. Taking notes, listening, reading, and taking examinations are skills that can be developed and learned. These skills are basic to any student whether in high school, junior college, a four-year college, or a large university. You should recognize the importance of developing these skills during your academic career. These skills can be used throughout your life. Listening and reading are most important, and successful individuals in all walks of life know how to listen and read effectively.

CHAPTER VII

Taking Notes

When you purchase your books, you should also buy a notebook for each class you have. You do not have to obtain one separate notebook for each class; one large notebook with divisions for each class will do just fine.

Prior to attending class you may want to identify each section of your notebook that will be used for different classes. If you are taking English 101 under Professor Smith, make a reference in your notebook indicating this. You will also find it handy to indicate the building and classroom number of each class in your notebook. This will be a convenient reference for you until you become familiar with the location of your classes.

It is a good idea to identify each set of notes by writing in the date and topic at the start of the lecture. This will help you organize your notes and will serve as a reference if you do miss class. You should get the notes from a friend if you have to miss class. By all means avoid missing classes unless it is a legitimate emergency.

Be sure to write down all of the requirements in each course. Your instructor should provide you with a syllabus that explains the requirements and indicates when they are due. If you are confused about the requirements, talk to the professor immediately; don't put it off. It will be to your advantage to know all of the course requirements as soon as they are presented so that you can start to plan for the semester. Remember the research literature describing good students; they are well-organized and they plan for the future.

When you get to class, there are several techniques for taking notes. The first thing to keep in mind is that you cannot get every spoken word in your notebook. Do not try to write the lecture down word for word as it is given to you. You should jot down key ideas, than go back and expand your notes after the lecture. A well-organized lecturer will explain the topic to be covered first. Be sure to get the main topics and anticipate when they will be coming up in the presentation. This will help to keep your mind on the lecture. You will need to listen and write down only the main ideas. By attempting to get every word down, you may miss some of the lecture. It is impossible to write everything down that is spoken, and any attempt to do this will force you to concentrate more on your writing skills than listening skills.

You will find that some preparation on your part prior to class will help you to follow the discussion and keep good notes. Another advantage in reading the assigned material prior to hearing the lecture is that it should be a review for you. The lecture should reinforce what you read and help you to retain the information. Often the lecture will expand and go into detail on certain aspects of the text material. You should always attempt to go over the assigned readings and do the exercises, problems or whatever prior to class. If you do not have time to read over the material or do all of the assigned exercises, at least look over the material quickly. A quick review of the material to be presented is helpful, if you do not have time to give it an in-depth reading. It is good to review the material quickly before class even if you have read it in depth. The quick review will focus your attention on the lecture topic and help you to concentrate on the presentation to be made by the professor.

You should always plan to leave some room for expanding your notes. One solution to this problem is to leave extra wide margins. Another approach is to write on only one side of the page and use the opposite side to expand your notes. This latter method is recommended, because you will have plenty of room to write your notes and to expand them also. Give yourself plenty of room to expand your notes after class. Don't worry about using a lot of note paper.

After each class period you should find some time during the day to review and polish your notes. This task should be done shortly after the class has ended, because the presentation will be fresh on your mind. You should review all of your notes and expand them by referring to the textbook if necessary. If you delay your review and expansion, you will tend to forget some of the information presented. The review of notes is most important. If you do not plan to use your notes by reviewing them, there is not much point in taking notes in the first place. Your notes can be a guide for future study. If you are consistent in the daily review process, it will not be difficult to study for tests. In some classes where you have to be active, like a chemistry lab, you may not take many notes, but after the lab is over you may want to jot down some important reminders you got from the instructor. In the physical sciences (physics, chemistry, and engineering) there will be more activities required of you in the classroom. The social sciences (sociology, history and political science) present more lectures and relatively few laboratory experiences. In some classes there may be a combination of activities (discussions, lectures, and labs).

You should also consider reviewing all of your notes once each week during the weekend. It will not take very long to do, if you have expanded your notes after each lecture period. The weekly review can be a simple matter of reading over your notes and giving some thought to what has been presented. You need not place a considerable strain on yourself during this process--just a quick review is all that's needed. By keeping up with the material that has been presented, you will find that it is not at all difficult to review for examinations. Most examinations merely require you to recall what you know about a subject. Research indicates that your ability to recall facts will be enhanced by frequent reviews of the material. This is a most important learning fact that has been demonstrated over and over by psychologists and educators.

The need for review of your notes cannot be overemphasized. It has been demonstrated that there is no beneficial effect to be derived from note-taking itself unless it is combined with a subsequent review of the notes (Van Matre and Carter, 1975). Note-taking by itself may interfere with learning in the classroom, but when performed in conjunction with a review process, it constitutes one of the optimal study strategies (Van Matre et al., 1975).

Do not overlook the benefits from reviewing what you have written. You may not realize that you are enhancing your ability to recall information by reviewing, but that is precisely what is going on. By keeping in touch with your notes through a weekly review process you will be familiar with the material when it comes time to study for tests. Reviewing reinforces, and retention is increased through repeated reviews. You will find that there will be no need to cram for tests if you have kept your notes up-to-date and reviewed them weekly.

There are very few students in college that fail to keep notes. One of the problems that a student has is that large doses of information will be coming your way on almost a daily basis; you must have some organized method of sorting this information and having it available when you need it. Note-taking is a form of organization that allows you to sort out what seems to be important. You eliminate the unimportant and concentrate on the material that is significant. If you expect to be tested on a particular topic, then it automatically becomes important. You may get the impression that you are doing all of this (taking notes and reviewing) just for the test, and that is partly correct. In the process of going to class, taking notes, and reviewing notes, you are learning many things. One of the things you are learning is how to discipline yourself and organize your thoughts for a specific mission. This is a form of training that some people call mental discipline. Being able to study and think in depth about various topics are activities that educated people do. They learned this routine while they were students, or they teach themselves without the benefit of a formal education.

Keeping notes and reviewing them frequently helps with the organization of your academic life. You will have a lot of activities in college that interest you, and it will be very difficult to participate in these activities unless you are well-organized. One of the advantages of organization is that you save time. Reviewing frequently will enhance your retention and your learning process will be more effective.

You will have to find a method of taking notes that fits your particular style. The suggestions provided in this chapter are probably being used by many serious students, but you may find deviations to the process. Quite often students fail to review their notes after class, and they only use their notes to review for tests. This is a poor practice, because you will have to relearn most of the material. If you expanded your notes after each class and reviewed all your notes weekly, then you need not relearn. You only need to have a concentrated review for the test.

Many professors cover most of the test questions in their lectures. This is a good reason to attend class and take good notes. In some classes you will find that the professor will outline the material very well and present it in a logical form. Others will not will not present their material logically; therefore, it will be up to you to make some sense of it. If you stay in college for four years you will experience a wide variety of presentations from your instructors.

You need to be flexible and adjust to the particular style the professor has. Some classes you take may not offer much in the way of notes. Usually the highly organized professor will give an abundance of notes during the course. You will have to sort out the significant information. Most professors cover a lot of material in the normal 50 minute class period. You will need to review your notes and expand them as soon as you can after class. If your day is unusually busy, you can go over the lecture notes and expand them at night. Many students work to keep themselves in college, so they don't have time during the day to review their notes right after the class period. If you find it impossible to make a review and expand your notes after class, do find time at night. It should not take over 15 or 20 minutes, and it will pay big dividends.

As you progress in higher education it will be less of a chore for you to make it to class, take notes, and review them. The whole process will become somewhat automatic for you. You can learn to master this process by doing it when you get to college. In fact, you can start to practice your note-taking habits in high school if you wish. Many freshmen, who are on their own for the first time in their lives, do not know what is expected of them in college, and they easily become discouraged. Many college freshmen have not had a real challenge in high school, and they get behind in their work and don't know what to do. You should make a major effort to stay up with all of your course work. Once you get behind, there will be increased pressure on you to hurry through assignments. The tendency will be to slip by with sloppy work. Most college professors expect quality work from you. If you keep up with assignments and make an honest effort to do the best you can, you shouldn't have too much trouble with academic matters.

There are some systematic hints on how to keep notes. Walter Pauk (1962), from the Study Center at Cornell University, has organized five steps involved in note-taking. These are:

1. *Record*. This process has been discussed. You need to pick up the main ideas or concepts given in class.

2. *Reduce.* This involves summarizing the ideas and facts that have been recorded. You clarify what you have taken down in class and concentrate on key terms and ideas.

3. *Recite.* You should review your notes daily and weekly. According to Pauk, you expand your notes at this step if you need to. You can cover up the main points in your notes and recite to yourself what you remember about each important idea or concept. As you do this you may have to uncover the recorded notes to correct yourself.

4. *Reflect.* This means thinking about the content of your notes. You can do this as you are walking to class or waiting in line at the cafeteria. You should visually see the outline you have made.

5. *Review.* Reviewing your notes is most important. You should do this every day for each class you attend and once on the weekend as a general review.

These five Rs (record, reduce, recite, reflect, and review) are easy to remember and will keep you well-organized when using your classroom notes.

As you get closer to the date for an examination you will want to become more familiar with your notes. You will need to review more frequently as the examination date nears. If you start a concentrated review process about two weeks prior to the exam date, you will find there will be no need to cram at the last minutes. Some students try to cram in all of their study and review time during the day or two before the examination by staying up late and reviewing. This is not a good practice for most students. It throws you off a planned schedule, and you may find that you will be quite tired when it is time to take the examination. If you have done your reviewing regularly, you will have a degree of self-confidence when it comes time to take an examination. As you know from section one, the concept of self-image is most important. Knowing that you are well prepared prior to the examination gives you a good feeling. You are apt to be successful if you feel confident about yourself.

If you intend to take notes on a textbook assignment, it is best to read the entire assignment and then make notes breifly in your own words. Text assignments vary in reading difficulty from course to course, and you may need to refer back to the assignment to complete your notes. If you are required to make an oral presentation of an assignment, attempt to organize your notes by topic. You may want to explain to the group that you intend to cover some specific topics then go into detail for each one. When making a presentation from your notes, you need considerable practice time. It will help if you have your notes on 3x5 cards or 5x8 cards. You can quickly slide off the used note-card.

Besides saving time in reviewing and helping with organization, your notes may be useful throughout your academic career. Graduate students usually keep elaborate notes, and they refer to them often. You may want to retain the notes you have made in the area of your major field. These references may be useful to you when you are on the job.

Notes are used by most professional people to help them organize their thoughts, and serve as reminders. You can develop your note-taking skills with a little practice. You should be consistent in reviewing your notes and reflecting on the information in your notes. You will be surprised at how much information will be retained as a result of good note-taking techniques.

The concept of note-taking is just one aspect of organization. Highly organized students usually make better grades than unorganized students. The research on superior students compared to failing students points to the need for *organization* in your daily routine. Attempt to be relaxed when in class and taking notes, but also be alert. You do not have to make a big deal about your note-taking habits. Consistency is the important thing. Just keep doing a little at a time on a regular basis and you'll be O.K. Your note-expansion or review periods will not take much time.

The entire effort goes toward training your mind to think in logical patterns, and it enhances your retention. As a student, the educational process forces you to think logically and retain information. You have to learn to conform to the instituional requirements within higher education if you want a college degree.

CHAPTER VIII

Listening

Most people do not make a special effort to listen; however, if you do train yourself to be a good listener, you might just improve upon your knowledge of the world. Certain professional people like psychiatrists and clinical psychologists are trained to listen very closely to individuals to pick up clues about their feelings and hidden meanings in what they say. As a student, you need not be concerned about hidden meanings, but you should learn to sense how your professor feels about a topic by listening closely to the lecture discussion.

In the classroom the professor is in *complete* control, and students are more or less at the mercy of the professor when it comes to establishing course requirements and making up test questions. You should learn to be a very good listener in class and at other times when you are in the presence of one of your professors (such as conferences, social events, or random meetings on campus). You can learn to concentrate on what has been said and how it was said in order to make a judgment about the professor's intentions. Usually classroom instructors make an effort to cover all the material that will be on an examination. You should be alert to repeated references to a particular topic or concept and be prepared to handle the topic if it's on an examination.

Another reason for listening closely is that the professor may touch on a topic not covered in your textbook and hold you responsible for information given during the lectures. Often professors will bring up material that is not included in the assigned readings; you should be able to repeat what has been given to you in the lecture. Examinations that are given for freshmen or sophomores require you to memorize facts and repeat them. Lower division courses do not usually call upon the student to do creative or original work. You may have to do a research paper or two, but for the most part you will be required to memorize a lot of facts for an examination.

The best way to become a good listener is to concentrate on what has been said and think about the topic as you are listening. A lot of conversations that take place do not require good listeners. Often poeple are thinking about what they want to say while the other person is talking. Many conversations are exchanges of points of view without much listening going on. In the classroom you may never be called upon to give an opinion or to make a comment. You can listen closely and pick up a considerable amount of information or you can daydream. If you do not listen to what is being said in the classroom, then you need not come to class. The primary reason for attending a lecture class is to absorb the information passed out by the professors. You need to be alert at all times in the classroom. There are rewards for coming to class in the form of information that will be on the examination. You have to be somewhat of a realist and understand that grades are vital to your existence in college. Without passing grades you cannot stay in college.

One good technique to help you concentrate on what is being said is to take notes. As mentioned in the last chapter, you should not try to write down every word that the professor says, but keep up with the lecture by jotting down key phrases, words, or sentences. Taking notes will force you to listen and concentrate on the lecture. Listening is a passive activity, but note-taking is an active behavior that requires you to translate what you heard into written symbols (words or sentences). A good listener not only hears what is being said but can make some sense of the words--good listeners make connections to what they know or have read recently.

As you listen in the classroom, you should raise questions if you do not understand the professor's comments. The professor, like anybody else, can become confused or unclear when delivering a lecture. Many college and university professors forget that their students are not as knowledgeable as they are, and they sometimes talk over the students. Professors have a habit of assuming that you know what they are talking about; they sometimes forget that a more elementary presentation is required. Often a professor can become quite enthusiastic about the topic and completely lose the students. That's the time to speak up, and say you don't understand--"please repeat."

Many students feel embarrassed to speak up and ask a question of the professor; this is particularly true in large classes. Students often take the position that their question may make them appear stupid or foolish. This is nonsense. Speak up when you need a clarification or cannot understand. This is the only way the professor has of knowing how effective the lecture is. If you find that you are completely lost, you should make an appointment with the professor and explain the difficulty. It could be that many other students are having similar problems and the professor does not realize it.

There will be times in your academic career when you will be required to listen to a particularly boring lecture. In fact, you may come to think that most lectures are boring--you'll just have to hang in there. Try to be active in your listening habits by:

1. Sitting erectly and being alert.
2. Taking notes.
3. Maintaining eye contact with the professor.
4. Thinking of some aspect of the lecture topic that is of interest to you.
5. Thinking of questions that relate to the lecture topic.
6. Concentrating on the topic at all times.

An apparently dull lecturer can often have some very interesting things to say. Do not underestimate the professor's understanding of students. The professor will know very well when you are not attentive. Your objective should be to give the impression that you're quite interested in everything that is being said.

There have been numerous studies conducted to teach listening skills (Russell, 1964). The ability to be a critical listener includes:

1. Recognizing the bias of a speaker.
2. Determining the competence of a speaker.
3. Distinguishing between fact and opinion.
4. Detecting the speaker's purpose.

It has been estimated that 45% of one's time in communication activities is devoted to listening

(Russell, 1964). In the classroom nearly 100% of the time you will be listening to the professor. Interest in the topic presented and the personality of the speaker have been found to affect listening comprehension (Brooks and Wulftange, 1964). You should attempt to develop an interest in your classroom lectures, and overlook the personality of the professor. Concentrate on what is being said. Devine (1967) found that:

1. Listening ability can be improved by instruction.
2. Listening is affected by such factors as maturity, rate of presentation and intrinsic interest in the topic.
3. Listening is, in some way, related to reading (Hollingsworth, 1964, reported on several research studies that indicated the improvement of listening abilities can improve reading ability.)

One way to improve listening comprehension is to develop stronger and wider interests (Brown, 1955). You should work at being interested in your lectures. There will be times when you don't feel like attending class; however, you should look upon your educational activities as an investment in your future. Your future employment may depend upon getting an education of some sort. Developing listening skills is one element of your professional development. Good listeners are required in all professions. Everyone, at some time in their lives, has to listen and interpret instructions. Your classroom lectures are a form of instruction that is being delivered by the professor. If you plan to stay in college and graduate, you'll have to be a good listener while in class.

Paying attention in class will help you to understand what is being said, and it is also the polite thing to do. Professors quickly become annoyed with students that conduct whisper conversations or fidget with personal items while in class. Another no-no is to start getting ready to leave before the professor has dismissed class. If you do have to leave class during the lecture, do it quietly, and then explain your reasons to the professor at the next meeting. You should be on your best behavior while in the classroom. Professors will treat everyone in class with courtesy, and they will expect students to behave themselves. Students will usually be asked to leave the class if they are causing a disturbance. College professors have very little patience with troublesome students. It is assumed that you want to learn or you wouldn't be in the college in the first place. Take advantage of your opportunities to learn and always remember that your professor has probably done considerable study and research on the assigned topic. You should *never* underestimate your professor's ability to teach you something.

There are many freshmen entering college every year that are not too serious about their courses, and it shows in their behavior. They miss class frequently, and they act uninterested when they do attend class. Teachers usually have little trouble identifying those students. Don't become known as a student that is just getting by with the least amount of work possible. Be alert in class, listen, take notes, ask questions, and enter into discussions. Your interest in the course will be determined by observable behavior patterns. College and university professors appreciate the interested student, and they will be glad to answer your questions and discuss academic matters.

Good listeners make adjustments to insure they can see and hear the speaker. Taking a front seat is better than a back one in large classrooms. Also, seats in front of the speaker are better than those to the side. If you cannot hear, let the speaker know. Taking notes, sitting erectly, and concentrating help your listening skills. It has been suggested that the listener ought to be attentive, quiet, dynamic, constructive, ready, bright, interested, rested, willing, and eager to concentrate (Nicholes, 1955).

Brown (1959) found that good listeners used an anticipatory set. That is, they thought about what was going to be said and anticipated what the speaker might say. It has been demonstrated that there is a considerable relation between the anticipatory set and listening comprehension. It might help your listening skills if you would give some consideration to what your professor is going to say. Right before class starts you should quickly reflect on the last lecture and make an attempt to predict what will be said during the upcoming lecture. A quick review of your lecture notes might help. Your curiosity about the subject may indeed be related to listening comprehension (Berlyne, 1966). Most scholars are curious about many different subjects; they usually have a broad range of interests (research indicates high ability persons are flexible thinkers).

There are conflicting opinions about the relation of reading habits to listening habits. There has been some evidence presented to support the theory that reading and listening behavior are closely related (Taylor, 1963). Blewett (1951) demonstrated that listening ability is as closely related to semester grades as reading ability. Using a survey questionnaire, Bird (1953) found that students rated listening as a more important factor in achieving academic success than reading. Brown (1955) found that superior students are good listeners. It would be logical to assume that listening is an important skill to students, since a considerable amount of time is spent in the classroom. Students are required to make use of what they heard in the classroom, and good listening habits help.

Like all of the academic skills mentioned, being a good listener can be learned. In fact, it should not take too much effort to be a good listener. You need to concentrate on the topic and follow some of the suggestions provided in this chapter.

CHAPTER IX

Reading

Reading is a most complex form of behavior, yet it is basic to all academic tasks. You must be able to successfully interpret the meaning of words to function in the academic environment. Unfortunately, there are thousands of freshmen annually entering our institutions of higher learning without the reading skills needed to complete college level work. This is a problem for students, parents, and teachers. The inability to communicate using words is definitely a handicap in any school system. College students will have to read more than they did in high school to keep up. Reading assignments in college take up difficult material, and there is more of it to read than in high school courses. It has been estimated from survey data that between 50% and 60% of the students identified as having reading problems do not receive special assistance (Elias, 1972).

A poor reader in college more than likely will bring with him or her traits that compound the reading problem. Spache's (1964) research indicates poor readers have low scores on attitudes toward school and may be emotionally disturbed regarding their reading abilities. Such factors as fear, hostility, lack of self-confidence, and lack of ego strength do relate to or have influence on the reading process (Woolf, 1965). Bannatyne (1971) notes a strong association between poor reading attainment and antisocial disorder, but little association between reading attainment and neurosis. Retarded readers are on the defensive and they lack solution seeking behavior (Spache, 1957). Feldman and Graff (1968) found that environmental deficiencies leading to cumulative experiences of frustration in early schooling constitute serious problems for academic achievement. A profile of the disabled reader in public school indicates he or she will be undernourished, tired, have a brief attention span, display vague concepts of time and space, and test average or below on standardized I.Q. tests (Feldman and Graff, 1968). If they make it to college, more than likely they will still have a similar profile.

Research on reading in college is plentiful. Artley, et al. (1973) found that the single most important reading skill related to success in the first year of college was comprehension. It is also most important to be flexible in your reading skills and pick up the key words necessary to function in a particular course. McDonald and Zimny (1963) found that comprehension and flexibility are the two primary ingredients of effective reading (being taught how to study in believed to improve one's flexibility and comprehension). Remedial reading programs are significantly related to persistence in college and resistance to extraneous influences which might lead to withdrawal (Yuthas, 1971). Factors which contribute most toward successful achievement in college are (Shaffer, 1973):

1. Scholastic aptitude, particularly verbal ability.
2. Positive attitudes and techniques for studying.
3. Acceptance of educational goals and professors.
4. An orientation toward and motivation for academic pursuits.

Poor readers usually have emotional problems. The emotional and learning aspects of a reading disability must be handled at the same time, usually on a one-to-one approach (Arcieri and Margolis, 1968). This means that the personality of the individual must be considered while attempting to accomplish learning tasks. Reading or learning disabilities require trained professionals to handle the associated emotional problems. Professional counselors are often required to work with students that display emotional problems along with reading problems.

It is important to know that students with reading problems usually have some sort of an emotional problem also. Children sometimes get off to a poor start in elementary school for one reason or another, and they lose their self-respect when they get behind in reading and other academic skills (Lane, 1972). A failure to learn to read by the end of the first grade is predictive of later failure. A child's sixth grade reading score rather accurately predicts achievement in high school and college (Bloom, 1976).

A loss of self-respect is present in college students who cannot read well. You will recall from Chapter I that the concept of self-image is a most important characteristic of good students. Reading improvement for depressed college freshmen does improve self-concept (Lund and Ivanoff, 1974).

Reading is a function of the whole personality, and psychological problems often underlie a reading disability in high school and college students (McDonald, 1961). There have been studies conducted which indicate the better reader is also a better adjusted person (Athey, 1966 and Brunkan and Shen, 1966). Hoiberg (1974) found that illiterates were related to neuropsychiatric problems. Students having difficulties adjusting to school learning environments usually have problems in other social environments. A reading problem is usually just one aspect of a major adjustment problem the student has.

Recovering from a severe reading disability takes considerable time. Students and teachers need to be patient, and parents need to be supportive. Research with successful reading programs have taken varied approaches. College students should perform analytical exercises such as understanding the author's purpose, principal thoughts, and inferences (Schick, 1968). After eight years of experimental programs at DePaul University, it was concluded those reading programs which correlated significantly with college grades were those which emphasized major patterns of organizing and developing thinking in each content field (Douglass and Halfter, 1958).

The flexible reader is most successful in college. Good readers have learned to adjust their reading procedures to the purposes of details and general impressions better than poor readers (Smith, 1967). Most students reach high school and go on to college without having developed reading flexibility. Many college students are inflexible in their reading habits (Moe, 1963). Students should be taught how to alternate reading techniques as the elements of the reading situation (purpose, previous knowledge, and nature of material) change (McDonald, 1965). It has also been found that the flexible reader comprehends more than the inflexible reader (Bowman, 1966).

Skills such as reading need to be combined with study skills methods in order to improve upon grades. Increased reading speed without a study skills course will not usually improve students' grades (Pauk, 1965b). It may be too much to expect that improved reading performance in a laboratory will result in improved grades (Smith and Wood, 1955). Study skills and examination situations also need to be taught. You need to have the skills necessary for academic work, and you need to know how to use these skills in learning situations.

Successful college students are likely to be good readers with a good self-image. They will also be flexible, organized, autonomous, and identified as having good mental health. Unsuccessful college students have characteristics related to poor readers. Reading is a key factor in the development of academic success. The research literature generally indicates that unsuccessful students will be poor readers with ineffective study habits. Learning how to organize your scheduled activities helps in reading programs as well as in the general area of study skills.

Parents should have indications of a reading problem in the early stages of a student's educational development. Early detection of reading problems is necessary to prevent problems in college. Above average readers can also benefit from a reading program in the areas of flexibility, comprehension, vocabulary and reading speed. These factors of reading can improve a student's chances of making better grades if they are taught in conjunction with a study skills course. The research evidence indicates teaching reading skills and study skills together is the best way to improve grades. Teaching reading does improve upon basic skills (Wedeen, 1967). There is, however, a better chance of improving grades when study skills are also taught.

Students are frequently unaware of some elementary notions about reading and flexibility. Most students do not know that the first sentence in a paragraph is the key sentence indicating what the rest of the paragraph is about. Reading the first sentence of a paragraph will let you know if you wish to read the entire paragraph. This can be useful when time is critical. Interest in the material will also help facilitate reading. Reading comprehension will be stimulated by a reader's interest in the subject. Adopting an eager, searching attitude of mind is helpful (Vernon, 1956). People with a high interest level will find it easier to read above their tested level (Pauk, 1973).

Some researchers indicate teaching reading speed for the sake of speed is not good. When reading speed is increased, comprehension usually goes down. The type of material being read will have a lot to do with the speed you can read it. A considerable amount of academic material needs to be reread and some thought needs to be applied during the course of reading it. Underlining while reading has resulted in significant improvement in reading comprehension and retention of textbook type materials. An active participation by the reader such as underlining definitely helps comprehension (Schnell, 1975).

Teaching reading in a clinic gets the best results when an individual program is worked out with each student. The individual approach has been found to be the best technique in teaching remedial reading. Individualized work means that a particular program has been planned based upon the individual needs of the student (Spache, 1960). This is also the case with study skills training. The individual approach seems to be the best technique. Homer L. J. Carter (1967) listed eight reading principles based on 22 years of experience in reading programs at Western Michigan University and the individual approach is emphasized.

1. The teacher must stimulate, inform and guide.
2. Every student should know how well he reads and should select for himself the specific reading skills he needs to acquire.
3. The student should understand that he can improve his reading ability and that the responsibility for doing so rests with him.
4. Each student should be given an opportunity to set up his own objectives and to attain them at his own rate and in accordance with his own plan.
5. Attention should be given to physical, psychological and environmental factors which may be affecting reading.
6. The students should be taught to read effectively the texts required in his college work.
7. Instruction should be simple, direct, and specific.

8. The student should evaluate his own achievement at the beginning and at the end of the laboratory activity.

This list is simple and is generally supported by the research.

A popular study technique for reading and studying textbooks has been developed by Francis P. Robinson (1970) called the SQ3R method. There are five steps of the SQ3R method--survey, question, read, recite, and review. The idea is to follow these steps when reading.

1. *Survey.* This means that you should glance over the headings in the chapter and read the final summary paragraph. The idea is to help you organize the ideas as you read about them.
2. *Question.* You are supposed to turn the headings into questions which will arouse your curiosity and help to increase comprehension.
3. *Read.* As you read you should actively search for the answer to the question you developed.
4. *Recite.* After you have read the first section, look away and attempt to briefly recite the answer to your question.
5. *Review.* Quickly review what you have read when finished. You should be able to recite the major subpoints under each heading.

This brief explanation of the SQ3R method indicates the major steps to take when studying a textbook. This method is partly a reading technique and partly a study technique. Many study skill centers use the SQ3R method when teaching reading in college. It should be obvious that the SQ3R method makes use of some reading research. The business of being interested is promoted, as well as a requirement to think about what you have read. This helps to focus your attention on the topic and improves comprehension over long time periods. Robinson's method is most popular among reading and study skills specialists. You might want to try it.

It has been demonstrated that preliminary skimming does enhance the rate of normal reading for most people (McClusky, 1934). You should learn to skim. This is an *important* first step for college students. Skimming is a kind of reading that draws your attention to the material and introduces you to the major topics to be studied when you read through it. By skimming the material you familiarize yourself with major points; it helps to focus your attention on the author's intent.

Another elementary step in developing your reading skills is to learn to read in *phrases* rather than word by word. The idea is to increase your eye span by focusing on several words and reading them in one eye fixation. You can increase your speed by focusing on several words at a time, rather than one word at a time. This technique is usually taught in reading clinics.

You can be taught to read faster in a reading clinic, but you will have to continually practice speed techniques. Reading is a skill, and like other skills you need to keep in practice to be good at it. When you attempt to speed read you should select material that interests you and is easy to read. The newspaper is good practice material for speed reading.

There will be times in your academic career when you should not attempt to speed through a required reading assignment. You may have to reread the material several times to get the meaning. On the other hand, you will also find that some assignments will not require a careful reading. You may be able to get by with a quick reading or in some cases just skimming the material will be sufficient. As you continue with your academic career you will learn what needs a quick treatment and what doesn't. This is where the flexibility comes in. Time is a valuable commodity for college students, and you will have to learn to make do with a quick reading when your course work backs up on you. If you do have a particularly difficult assignment, be sure to plan enough time to thoroughly read the material. As you learned from Chapter IV, planning is extremely important.

You should think about your reading habits and consider taking a few lessons from a reading clinic to improve your reading skills. Above average students should consider getting advice on speed reading, reading comprehension, and effective reading habits. You may be able to improve your present skills and habits. Anyone who does a considerable amount of reading can probably become more efficient with just a little attention to their reading habits. It has been found that an increase in reading is likely to increase reading achievement as measured by standardized tests (Yap, 1977). Most of us have not had professional advice concerning reading skills, and we have picked up poor habits. You may be able to become quite a bit more efficient with some advice from a professional reading specialist. Most large colleges and universities have a reading clinic, and they can provide you with some very good professional advice regarding your reading habits.

Reading clinics vary regarding content and duration. It has been found that several departments get involved in delivering reading services (education, psychology and English). Education and psychology departments were the pioneers in starting college reading courses with English joining the movement later (Lowe, 1967). A survey involving 177 institutions of higher education indicated that reading course titles varied widely with 50 different ones in all (Huslin, 1975). Some reading courses award academic credit for taking the course. This is usually the case in small two-year institutions.

In a rather detailed review of reading improvement programs for college students, Lowe (1967) reported that some type of college reading improvement program has existed since before 1900. This was far ahead of the invention of the reading pacer in 1930, the development of reading films in 1940, the mention of controlled reading in 1938, the publication of a national journal devoted exclusively to reading in 1948, and the founding of an organization for college reading in 1952 (Lowe, 1967).

Since reading is basic to all disciplines, students should develop proper reading skills and practice these skills diligently. A poor college reader is handicapped in many ways, as indicated by the research evidence. You should consider attending a reading clinic before a reading problem becomes a major obstacle to your academic development.

Remember that you can learn to improve your reading skills just as you can learn any type of behavior. If you have a serious reading problem, considerable time will be required before improvement will be noticed. Have patience and work hard--improvement will come.

CHAPTER X

An Approach to Taking Examinations

Examinations can be a real hang-up for many students, because they get excited and often don't think clearly. There is such a thing as being test anxious. Students at all educational levels have learned to respect examinations and in most cases fear them. It is not uncommon for students to report that their minds went blank during an examination. Anxiety tends to depress performance more with marginal ability students (Sommer, 1968 and Maxwell, 1971).

Poor students show more stress during examinations. However, it has been observed that examinations are stressful for good students as well as poor ones (Sommer, 1968). Educators have found that a certain amount of anxiety is good for a student, but too much worry and anxiety can be debilitating (Mandler and Sarason, 1952 and Wrightman, 1962). The concept of facilitating and debilitating test anxiety has been observed in students at various educational levels (Sarason et al., 1952 and Alpert and Haber, 1960).

Students that are concerned enough to work hard in preparation for an examination have some anxiety that can be good for them. They are alert and sensitive to the types of questions they may get on an examination. If you worry a great deal and become extremely nervous just prior to an examination, you will find that your anxiety is debilitating. That means you will not be able to function normally during the test, and your score will be lower than it would have been if you were not anxious.

The trick is to build up some concern or anxiety about the examination without having it work against you or becoming debilitating. A little tension is necessary to keep your thoughts centered on the problem at hand. Individuals who relax as much as possible while considering a problem seem to be unable to organize the problem (Bloom and Broder, 1950 and Walsh et al., 1968). Students need to control their concerns and anxieties about examinations. They must use their anxiety to spur them on. Frequently students become so uptight about examinations, they do not perform up to their ability. This happens to many students at all educational levels. The threat of an examination is a real source of worry and discomfort to students.

It is difficult to give advice on how to control test anxiety. The literature supplies little evidence on the optimum amount of tension for various testing situations (Bloom and Broder, 1950). Each student is different and has a unique perspective regarding the testing situation. Usually students have learned to fear examinations from some early school experiences they had. Fear is learned from past experiences, just as we learn certain behaviors. To overcome the fear of examinations, students must come to believe that they can do well and, therefore, have nothing to be afraid of. This is a difficult task. Good teachers usually test students on material they know. It would serve no purpose to give an examination covering material that students do not understand. Teachers can do quite a bit to help students overcome test anxiety by not making the test environment menacing or threatening.

College professors usually present all the material they expect you to know in their lectures or through the textbook. The one catch is that they cover a lot of material, and they go into considerable depth when explaining it. You will find that college instructors have quite a lot of knowledge about their particular field, and they want you to be familiar with this knowledge. A problem will be to organize the the knowledge presented and to have a command of it when it comes time to take a test. In Chapter VII note-taking was discussed as a means to help you organize your thoughts. If you take good notes and review them frequently, you will find that you do not need to cram for examinations. Cramming for an examination means waiting until the last minute to start studying, and then staying up late the night before the test. This is not recommended. It has been found that female students tend to study more and cram less than males (Gelso, 1967). Perhaps women are more conscientious than men.

Most examinations in college are a review of what has been covered in the classroom. If you attend class regularly, take notes, read the text assignments, and review periodically, you should do well on examinations. At least you should pass them without too much trouble. Prior to an examination it may be a good idea to slow your rate of reading down--try to be methodical and thorough. It has been found that during the week prior to final examinations, the more scholastically successful and bright freshmen do slow down their rates of reading with textbook material (Yarington, 1967).

Some professors will give examinations frequently, however, most college instructors do not give a lot of tests compared to high school instructors. You may find that a mid-term and a final examination are the only tests scheduled for some classes. This will depend upon the instructor. In upper division classes (junior, senior, and graduate classes) there are considerably few examinations than in the freshmen and sophomore classes. Many large universities take the position that the freshman year is a sort of trial period for students, and they must prove themselves as being worthy to continue by taking a lot of examinations. Freshman courses give examinations more frequently than courses in the upper division as a general rule. In many respects freshmen are considered to be on trial. They must prove themselves to be worthy students in order to be allowed to continue for three more years. This attitude may not be quite so pronounced at smaller institutions of higher education. The smaller institutions usually give more support to their students, although this may not be the case in all situations.

If you are conscientious about your work and follow the suggestions given in this section, you should not have much trouble staying in college. Grades are in some respects a reward for making an effort to learn. You should not make grades the sole objective of your education; however, you should be aware that passing grades are required. Your college grades are a permanent record that is usually made available to prospective employers. Many people think that your college grades are a reflection of how much you know or how well you will do in the world of every day work. In some respects a good college record does indicate that you have learned to learn and that you can adjust to serious work situations. It may be that the grades you make in college are not a good indication of your potential; however, many people treat college grades as an indicator of potential.

It is important for you to understand the implications of your college grades. If you plan to attend some professional school such as law or medicine, your undergraduate grades are most important. There has been increased competition to get into professional schools, and considerable weight is given to previous college work. If you plan to enter law school, medicine, or graduate school, you should plan to do the very best you can in your undergraduate years.

Professional schools place considerable emphasis on undergraduate work, and since you will be in competition with many other students, schools use previous grades as an indicator of how well you will do.

There are two classifications of examinations in college. One is known as the objective test, and the other is referred to as subjective. Objective examinations usually have specific answers that do not require any interpretation on the part of the instructor. Two plus two is four; it can never be anything else. This is an example of an objective question. True-false, multiple choice, or fill in the blank type tests are known as objective tests; only one right answer will be counted as correct.

Subjective tests are those where the instructor's judgment is used to make an interpretation of how well you answered the question or responded to a given situation. In your English class you will be required to write essays, and your instructor will aware a grade based on how well you constructed your sentences and developed your theme. The construction of sentences, spelling, and grammar are objective items based on accepted procedures. However, the development of a theme or the emphasis you give certain aspects of the essay will be a subjective matter, and an interpretation will have to be made by the instructor as to how well you did this. Another example of a subjective examination is a requirement to write an essay. The so-called essay question is very popular in the social sciences (history, political science and sociology). You might be asked to compare, outline, state, justify, discuss, or explain in your own words some aspect of your course. You should concentrate on facts when writing an essay examination and less emphasis should be given to writing style. When you respond to an essay question, try to write a strong opening paragraph. Sometimes this can set the tone for the rest of the essay. The instructor can be favorably influenced by reading your first paragraph, and this carries over to the rest of the essay. You can practice writing essays by making up your own questions and responding to them.

Another tip regarding essay questions is to think of *who*, *what*, *when*, *where*, *how*, and *why*. If you can answer the question by responding to the *who*, *what*, *when*, *where*, *how*, or *why*, this will usually result in a strong answer. Should you go blank, think of answering the question in terms of who, what, when, where, how and why. You may not be able to respond to every one of these reminders, but getting something down on paper may jog your memory, and your recall may come back. The best way to remember is by association or classification of things. For instance, if you are remembering dates, start with the earliest and work forward. Grouping similar things together helps in remembering them (Voeks, 1970).

The best way to prepare for an examination is to organize the material and have some detailed knowledge of the most important aspects of that material. When you are preparing for math, chemistry, or physics examinations, you will be getting objective tests--one correct answer. You should review all the problems that you might expect, and practice doing them over and over. For subjective examinations, where the essay question is likely to be given, you should organize your material and have a considerable grasp of the facts. Concentrate on knowing as much as you can about all of the material you are responsible for. Essay examinations usually require you to be able to put together a lot of information in a logical format. You should be well-organized and prepared to write on several topics.

For major examinations like finals or mid-terms you should start your preparation a couple of weeks prior to the exam date. Plan to make one complete, thorough review of all the material covered, then make several quick reviews. You should give special attention to those particularly difficult sections of the material being studied.

You can study too much for a test and lose your perspective. Plan your studying so that you have time for recreational acitivities. In fact, you should not plan to do more than a quick review the night before the exam. Make a thorough review of all aspects of the test material one week prior to the examination. During the days just prior to the exam you should not be under too much strain if you've done the major reviewing the week before. Attempt to be relaxed going into the exam. Knowing that you have worked hard preparing will help. Remember, if you've done your best, you need not worry. The major problem for most students is that they get behind by putting off starting to study, and they often feel they must cram right up to the last minute. This indicates a lack of planning or concern for the examination, and can increase your anxiety. Students who are well prepared do not suffer as much from a debilitating type of anxiety. The best advice to prevent test anxiety is to be well prepared by starting your review a couple of weeks before the examination. Get yourself ready early.

The business of taking tests is a skill that can be learned, and you should develop a healthy outlook which will enable you to pass. We take various kinds of tests throughout our lives: interviews, try-outs, transfers or promotions, ratings by a supervisor, and more formal tests involving licensing or entering law or medical practice. The more you practice the skills necessary to be successful in passing tests, the better you become at test taking.

Students can develop an aggressive attitude toward learning and gain confidence in their ability. You need to learn to organize ideas, make generalizations, and think critically in order to retain information and do well on examinations (Maxwell, 1971). You might want to think of an examination as a challenge to meet and master. Athletes train for competitive games and scholars should learn to train for examinations. In an examination you are competing for a passing grade, and there is a spirit of competition involved. If your college academic record is important to you, you should plan carefully for each examination you take.

When you are working on an examination, you should take all the time allowed. Research evidence indicates that good students work longer on examinations than poor students (Biggs and Johnson, 1942). Students who take all of the allotted time usually have higher grades through sheer persistence. In a written final semester examination lasting three hours, highly motivated and predominantly success-motivated students turned their work in later than students with low motivation (Atkinson and Litwin, 1960). Students with relatively lower academic abilities can compensate by being motivated to succeed. Most professors learn that students who take the full amount of time to complete their examination usually do considerably better than students that hurry through.

If you do complete a test quickly, then go back over the entire examination very carefully in order to check your work. As a general rule, speed usually produces more mistakes. You should carefully read over your test questions to be sure you understand what is required. This is particularly true with objective questions (true-false and multiple choice questions). True-false and multiple choice examinations can be written to fool you, if you do not read the questions carefully. It is important for you to be very alert when taking an examination. You could easily miss a question or two simply because you didn't read through it.

Some examinations are timed to encourage speed, but most of the examinations you take in college will allow you ample time. Many national aptitude examinations are timed, and speed is an asset; but these types of examinations are not usually given in college courses. Most professors plan an examination so that the average student will have plenty of time to complete the examination. Normally you will be allowed plenty of time to complete your examinations.

If your professor indicates some areas will be covered during an examination, be sure to thoroughly cover this material. This means that the professor wants you to know this information well, so you have been given an important hint about what's going to be covered. Take advantage of this hint by being especially well prepared in those areas where you know for certain you will get questions.

It may help you to talk to other students who have taken the class before you. These students can give you some idea about what to expect on your first examination. They can also let you know how the professor grades on subjective type tests. You should know something about your professor's particular likes and dislikes. As you attend classes you will come to know what the prof wants, but it may be to your advantage to have this information prior to going to class. Some classes have more requirements than others, and you should know what you're getting into when you sign up for a course.

There are some tips that can be given regarding true-false or multiple choice examinations. Many people mistakenly believe that first impressions are best, and they should not be encouraged to go back and change answers. The research evidence does not support this notion. A detailed analysis of answers in 21,903 true-false test responses showed the correct changes to be almost exactly twice as frequent as incorrect changes (Lowe and Crawford, 1929). Other researchers have found the same evidence (Mathews, 1929; Hill, 1937; and Reile and Briggs, 1952). It appears that poor students have a tendency to change their answers more frequently than superior students (Hill, 1937). First impressions may not be the best response to objective tests. At all grade levels it has been found that the percentage of wrong to right revisions tends to exceed the percentage of right to wrong responses (Reile and Briggs, 1952).

When taking an objective test, it is best to go through the examination and answer all the questions you are sure of. Do not answer those questions you have doubts about. After you have done this, go back through the test and attempt to answer the questions you skipped. By answering questions you know, you may pick up some information about the questions you're not sure of. When you have finished your examination, always review your work if you have time.

On essay examinations you should always plan your time according to the number of questions asked. For example, if you have four essay questions to answer in an hour, you should plan to spend 15 minutes on each question. During the examination you should be aware of the time. In some cases you will be working against a time requirement, and you may have to be quick with responses.

Try to control the tension and anxiety you feel about an examination. If you have done a considerable amount of work for an exam, just remind yourself that you've done the best you can. *Have confidence in your ability.*

If you have done poorly on an examination, make an appointment with your professor immediately. Don't wait until the end of the course and expect to get help--it's too late at that point. Just as soon as you get an indication of trouble, do something about it. Your professor may have some information for you that will help. Instructors can give you advice and a few tips that might help, but you will have to do the work. There are no shortcuts. The best policy is to start each semester off by not getting behind.

Keep yourself organized and learn to manage your time. This should sound familiar by now. Organization is *most* important when preparing for examinations. Good students rarely stay up late the night before an examination and cram. Waiting until the last minute to study is an invitation to panic and lose control. If you wait till the night before to start your study plans, it's usually too late to make a difference.

CHAPTER XI

Some Concluding Remarks

Suggestions for improvement of your academic skills have been provided in Chapters VI through X. One central theme has been organization. You need to be well-organized when taking notes, listening, reading, and preparing for examinations. Organization implies that you have a plan to accomplish a specific task. You should look at learning as a task required of all students. Successful students do not waste their time, and they have given study behavior a top priority.

If you follow the suggestions in this section you will be busy most of the time, but you will probably have passing grades. Serious students do not have a lot of time to waste. They take advantage of their free periods to study, review notes, or read their text assignments. If you take things one step at a time and do not put off required work, then you will not be pressured to complete projects at the last minute.

Your college work can be a lot of fun, but it requires that you discipline yourself. Discipline is one of the learning outcomes of a college education. Most college graduates have learned to manage their time, and they understand it is important to be able to concentrate and study. Intellectual development is a *major* goal of a college education. There are other outcomes from a college education, such as social and cultural development; however, intellectual development is perhaps the primary objective.

Learning and intellectual development do not end when you graduate from college. The development of your mind never stops; we are always learning. A college education merely provides you with some skills to keep on learning and developing. If you know how to manage your time and can read, write and think logically, then you are prepared for numerous jobs.

You may find the suggestions provided in this book do not apply to you in all cases; however, you should attempt to make some general applications in your routine. There are no specific instructions that can be applied to all students to help them attain better grades. Indeed, there are some researchers who doubt there is such a thing as good study habits that can be used by all students in higher education (Turrell, 1937; Smith, 1966; Cooper and Foy, 1969; Biggs, 1970a; and Biggs, 1970b). Maddox (1963) found that a strict allocation of time was a characteristic of students in poor standing. Highly motivated people often work in spurts of activity, maybe two or three days without interruption (Heckhausen, 1967). Smith (1966) believes that students must develop their own individual approaches to study habits. Individual approaches are fine, but many students use the "individual approach" as an excuse to do nothing! Remember that studying is hard work, and you *must* be consistent.

The suggestions in this section are based on the research evidence that generally can be applied to most students. If another method of study works for you, that's fine. If you do not have a particular method of study in mind, then you might want to try some of the suggestions that have been provided in this section.

Most college students do not think about study methods or particular study skills. They usually continue to study the way they did in high school. This is where the problem comes, because high school requirements are much less demanding than college requirements. In college you will be on your own to develop study strategies that will get you through. In addition to being on your own and responsible for your activities, you are required to adjust to new social and academic requirements. This adjustment process requires you to be flexible in your behavior patterns. You have to adjust to different class requirements and the particular demands of each professor.

If you can learn to manage your time and follow some of the suggestions provided, you will probably be successful in college. Your success will depend upon how much effort you want to put into your academic career. This is a matter that only you can decide. "When we have the ordinary experience of individuals dominated by rational categories instead of ordinary experience expressing itself with reason, we create a world which is anti-life, in which the individual must submit to the needs of top-down organization, must postpone the moment for some future utility, futility" (Denton, 1970, p. 145). Many students do not intend to be scholars, and they only do enough to get by.

This is fine, but don't underestimate the amount of work required to pass your courses.

You will be in contact with all kinds of students while in college. Some will just barely make it through, and others will work very hard to earn good grades. You will have to decide for yourself what is important and how you want to conduct your life. The significant contribution from a knowledge of the research evidence is that it lets you know what has happened in the past and what is likely to happen in the future. Knowing what has helped others may help you.

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